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ABSTRACT

The educational park environment that the District of Columbia schools are planning is seen as a learning environment consisting of a cluster of facilities, services, technological resources, and staff, and operating within a flexible administrative structure conceived and designed to optimize the advantages of the economies of size. The study, financed by a Title III, ESEA grant, indicates that the establishment of such a park for 18,000-20,000 students from early childhood to grade 12 would be advisable for Washington, D.C. Educational data related to this report are contained in a series of appended tables and graphs. (Author/MLF)

TOWARD ....
A NEW SCHOOL IN THE NATION'S CAPITAL

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THE EDUCATION PARK

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DEVELOPING FLEXIBLE EDUCATIONAL PARK PLANNING FORMATS FOR THE DISTRICT OF COLUMBIA

A Study of
The Extent to Which the Quality
of Educational and Supporting Community Services
are a Function of Enrollments and Time Utilization

FINAL REPORT

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TABLE OF CONTENTS

PAGE

Abstract vi

DEVELOPING FLEXIBLE EDUCATIONAL PARK PLANNING FORMATS FOR THE DISTRICT OF COLUMBIA

Section 1: The District of Columbia Board of Education Approved a Concentrated Study of Educational Parks Under a Title III, ESEA Grant to Investigate the Extent to Which the Quality of Educational and Supporting Community Services are a Function of Enrollments and Time Utilization. 1

Section 2: The Park Study Group was Appointed as a Special Task Force to Evaluate the Recommendations of the Passow Report on Educational Parks and Supplementary Learning Centers. 2

Section 3: The Educational Philosophy of a Modern Urban School Must Foster Human Values and Effectively Deal With Feelings of Alienation as Well as Emphasize the Importance of Equality of Educational Opportunities, Economic Competence, and Full Citizenship. All School Programs and Supporting School Plant Planning Should Support This Philosophy. 3

Section 4: An Extensive Study of Educational Park Plans in Many Other Cities Shows That What Constituted An Educational Park Varies Greatly From Place to Place According to the Needs of the Individual Community 6

Section 5: Although There Are Many Reasons Why School Systems Consider Building Educational Parks, Relatively Few Detailed Studies Have Been Conducted Which Show Program Advantages 8

- A. A Modern Urban School Must be One Which Strengthens the Interests of the Students, Which More Often Adapts its Program to Their Needs, Rather Than Requiring The Student Always to Adjust to the School. Grouping of Students Must Take Into Account the Social Maturity Level of Each Child, His Emotional Stability, As Well as His Particular Needs and Interests 9

PAGE

Section 13: The Present School Construction Program Should be Recast (1) to Rapidly Eliminate Overcrowding, Utilizing Relocatable Units Whenever Possible and (2) to Orient New Permanent Construction Toward Creation of Park Complexes. 31

Section 14: The D. C. School System Now Has a Number of School Complexes Which May be Used As the Nuclei for Developing Educational Parks. Clusters of Buildings, However, Are Not Educational Parks. New Forms of Organization and New Types of Space Should be Investigated. 34

Section 15: The Development of an Experimental Educational Park and Supplementary Learning Center in the Nation's Capital Would be of National as Well as Local Significance and Thus Funding of the First Park Could be Shared by the District and the Federal Government. 38

Section 16: The Findings of the Task Force on Educational Parks and Supplementary Learning Centers and the Recommendations of the Educational Park Advisory Council of Consultants Helped the Superintendent of Schools and the Board of Education to Give the Request for Educational Park Planning Funds an Extremely High Priority in the FY 70 Capital Outlay Budget for the D. C. Public Schools. 41

Exhibits 44

Appendices

A. Recommendations and Comments of the Executive Study Group to the Board of Education on the Report and Recommendations of the Task Force on Educational Parks and Supplementary Learning Centers 76

B. A Summary of Educational Park Development in the Nation's Capital 78

C. Statement by the Educational Park Advisory Council in Support of the Educational Park Preliminary Planning Funds FY 70 D. C. Public School Budget, Read by Dr. William R. Manning, Superintendent of Schools, at the May 12, 1969 Hearings of the Subcommittee on District of Columbia Appropriations, House of Representatives, William R. Natcher, Chairman 80

Bibliography 87

PAGE

B. A Modern Urban School Must Provide an Opportunity For Teachers to Fully Realize Their Professional Potential and Training. The Use of a Variety of Supporting Staff and Services Must be Made Available to Provide The Teacher With a Repertoire of Referral or Support Options to Meet a Variety of Learner Needs 11

C. A Modern Urban School Must Provide a Wide Variety of Total Community Services. It Must Become the Focal Point for Community Life Creating Not the Neighborhood School of the Past But the School Neighborhood of the Future 14

Section 6: The Weight of a Considerable Body of Competent Professional Judgment Indicates That Substantial Educational Advantages Can be Derived From Educational Parks 15

Section 7: Professional Judgment of Educators as Well as Some Specific Studies of Program Factors Indicate That Larger School Enrollments Offer the Possibility of Substantially Improved Educational Program Offerings ... 19

Section 8: Professional Judgment on Community Services as Well as Some Specific Studies of Community Service Factors Indicates That Facilities and Personnel In a Complex Such as the Educational Park Will Work for Greater Efficiency and Service of the Community 21

Section 9: The Educational Park Appears To Meet the Total Educational and Community Service Requirements of a Modern Urban School and to Meet These More Economically. 24

Section 10: Study of Program and Facility Utilization Factors Seems to Indicate That the Establishment of a Community Service-Centered Educational Park of about 18,000-20,000 Students From Early Childhood to Grade Twelve Would be Advisable for Washington, D. C. 26

Section 11: A Possible Alternative to the Above Proposal Would be the Establishment of One 14,000-16,000 Community Service-Centered Educational Park for Middle and High School Students 28

Section 12: The Experimental Educational Park Should be Designed in Such a Way as to Serve its Own Community While at the Same Time Offering Services to Supplement the Entire District of Columbia School System 29

AN ABSTRACT OF THE FINAL REPORT ON "DEVELOPING EDUCATIONAL PARK PLANNING FORMATS" IN THE NATION'S CAPITAL

The District of Columbia Public Schools, through its Division of Planning, Innovation and Research, has been investigating the feasibility of a community service centered Educational Park for Washington, D. C. This project is funded under a Title III, ESEA grant from the United States Office of Education.

The originally outlined summary of the proposal for the grant stated that:

> This project will investigate the extent to which the quality of educational and supporting community services are a function of enrollments and time utilization. Phase one will be diagnostic and will develop educational-community service specifications to guide architectural planning; phase two will develop a PERT computerized Educational Park Planning Program.

Before meaningful educational-community service specifications could be developed, considerable study had to be made of the possibilities which the Educational Park seemed to offer for improved quality of education for the total community and to what extent enlarged enrollments affected this quality. To do otherwise would have been, in effect, to follow the traditional pattern of educational planning which most of our consultants and public school supervisors felt leaves much to be desired in terms of meeting the needs of today's urban society.

The thrust of the study has been to determine whether or not sufficient program advantages can be obtained from further centralization of schools and the concentration of a larger number of students in larger school complexes. At this point in time it is possible to make the following general statements about Educational Parks:

1) The Educational Park is seen as a creative way to maximize efficient cooperation between educational and community services or agencies.

2) Although there are many reasons why school systems consider building Educational Parks, relatively few detailed studies have been conducted which show specific program advantages.
3) An intensive study of Educational Park plans in many other cities shows that what constitutes an Educational Park varies greatly from place to place according to the needs of the individual community.
4) The Educational Park concept is seen as an economical approach to improving educational programs to a degree that may offer substantial relief to the inter-related educational social and economic problems of urban areas.
5) Soundly developed evidence indicates that substantial educational and community advantages can be derived from larger school complexes and do it in an economically feasible manner by maximizing efficiency of utilization.

Although Educational Parks have been developed in many different ways, there are some features which distinguish Parks from the more traditional school. The Educational Park environment for which the District Schools are planning and which is described in this final report, is seen as a learning environment consisting of a cluster of facilities, services, technological resources and staff, operating within a flexible administrative structure, conceived and designed to optimize the advantages of the economies of size.

The Washington Educational Park is seen as melding the services of community and municipal services with those of the school to effect a continuous and coordinated attack on educational and education-related problems. The concept advocated here, is that of a "total Park" which would serve students from prekindergarten through high school as well as the adult population. This Park would function "around the clock and around the calendar" employing new concepts of scheduling and programming of space as well as offering new and expanded educational and community-service programs.

The Educational Park proposed for Washington, D. C. aims primarily but not exclusively:

1) To improve and expand educational program offerings and community services through efficiencies and economies relative to size of enrollment;

2) To create an environment attractive to teachers and supportive of their professional growth and development;
3) To phase out and replace antiquated and obsolete facilities with facilities of sufficient flexibility to meet the changing requirements of a modern educational program;
4) To provide additional facilities to eliminate or significantly reduce existing overcrowding and to meet the space requirements of expanding or new programs; and
5) To develop a learning center in the Nation's Capital that will be of national as well as local significance.

An earlier interim report, dated June 6, 1968, and recommendations, growing out of Phase I of this project have been reviewed by the Executive Study Group, the Superintendent and the Board of Education. The Superintendent recommended and the Board approved the inclusion of the request for Phase II site and planning funds for the first Educational Park in the FY 70 Capital Outlay Budget. School officials are awaiting Congressional action on funding for the next phase.

Phase II funding is sought for site selection and studies; development of program specifications, and preparation of preliminary architectual design.

Phase III is seen as developmental, consisting of construction and equipping of the facility and in-service training of school personnel.

Phase IV is the operational stage, beginning with the opening of school doors for educational and community uses.

1. THE DISTRICT OF COLUMBIA BOARD OF EDUCATION APPROVED A CONCENTRATED STUDY OF EDUCATIONAL PARKS UNDER A TITLE III, ESEA GRANT TO INVESTIGATE THE EXTENT TO WHICH THE QUALITY OF EDUCATIONAL AND SUPPORTING COMMUNITY SERVICES ARE A FUNCTION OF ENROLLMENTS AND TIME UTILIZATION.

The District of Columbia Board of Education approved a concentrated study of Educational Parks and Supplementary Learning Centers. This study was funded under a Title III, ESEA grant from the United States Office of Education. The thrust of the Study was to investigate to what extent the quality of educational and supporting community services are a function of enrollments and time utilization. The findings of the Educational Park consultants and staff are contained in this report.

Exhibit I listing the names and titles of some of the people consulted in this study is included at the end of this report. This is a diverse and distinquished group who have joined their considerable talents to examine what is really meant by the Educational Park concept and to consider its feasibility for the District of Columbia.

This report considers, as specified in the planning grant, flexible Educational Park planning formats. The originally outlined summary of the proposal for the grant stated that:

> This project will investigate the extent to which the quality of educational and supporting community services are a function of enrollments and time utilization. Phase one will be diagnostic and will develop educational-community service specifications to guide architectural planning; phase two will develop a PERT computerized Educational Park Planning Program.

In preparing the report it was found that before meaningful educational-community service specifications could be developed, considerable study had to be made of the possibilities which the Educational Park seemed to offer for improved quality of education for the total community and to what extent enlarged enrollments affected this quality. To do otherwise would have been, in effect, to follow the traditional pattern of educational planning which most of the consultants and public school supervisors felt leaves much to be desired in terms of meeting the needs of today's urban society. Hopefully, the Educational Park concept provides a means of approaching the entire problem of education and related community services from a fresh viewpoint.

The focus of this report, consequently, is an investigation of the extent to which the quality of educational and supporting community services are a function of enrollment and time utilization. It is felt that the development of the educational and community service specifications for the first experimental Educational Park in the District, let alone important elements of master planning, would require a larger staff effort than was possible under this grant.

2. THE PARK STUDY GROUP WAS APPOINTED AS A SPECIAL TASK FORCE TO EVALUATE THE RECOMMENDATIONS OF THE PASSOW REPORT ON EDUCATIONAL PARKS AND SUPPLEMENTARY LEARNING CENTERS.

The Executive Study Group of the D. C. Board of Education established a special Task Force to make a concentrated study of the Passow recommendations regarding Educational Parks and supplementary Learning Centers. The following quotations from the Passow Report formed the basis for this study:

> It is recommended that the District initiate joint planning for one or two experimental metropolitan school parks for 10,000 to 20,000 pupils. While metropolitan school desegregation is obviously not immediately possible, it could be attained to a substantial extent by establishing metropolitan school parks. The typical park would be composed of a number of separate school buildings, each of which would house a primary, a middle or secondary school with a student body of whatever size would produce the most favorable educational situation.

> It is recommended that several Learning Centers, each with a specialized function, be developed around the District's borders. Environmental sciences, fine and performing arts, humanities and social sciences, world of work -- these are illustrative of the areas in which learning might be centered. Each Learning Center would be provided with a highly qualified staff, all of the equipment and resources it needed and full instructional flexibility. Students would be scheduled for the centers as appropriate to their needs, leaving their home schools for a few afternoons or days per week or for longer blocks of time. The purpose would be to provide the richest assemblage of learning resources, personnel and material, possible for the largest number of students as required by them. Each of the centers would serve the entire District and by special arrangement, some of the neighboring Districts as well.

Prior to considering the specific questions related to these two recommendations, the Park Staff considered at length the fundamental goals, a philosophy if you will, of a modern urban school, for objectives must be established before plans can be determined.

3. THE EDUCATIONAL PHILOSOPHY OF A MODERN URBAN SCHOOL MUST FOSTER HUMAN VALUES AND EFFECTIVELY DEAL WITH FEELINGS OF ALIENATION AS WELL AS EMPHASIZE THE IMPORTANCE OF EQUALITY OF EDUCATIONAL OPPORTUNITIES, ECONOMIC COMPETENCE, AND FULL CITIZENSHIP. ALL SCHOOL PROGRAMS AND SUPPORTING SCHOOL PLANT PLANNING SHOULD SUPPORT THIS PHILOSOPHY.

There are numerous ways to describe educational philosophy. Most schools, including the District of Columbia, attempt to describe it in terms of knowledge, economic competence and full citizenship or even equality of opportunity. Certainly these concepts are important elements of such a philosophy and many people view them as the only "legitimate" objectives of the school (i.e. the fostering of academic skill and subject matter content). Cognition is thus the end product of the process and the children's feelings are used as motivational devices to get to the "prescribed academic cognitive content." However, as stated in the article, "Reducing the Behavior Gap":

> ... it is obvious that knowing something cognitively does not always result in behavior that follows on that knowing. This is because knowledge alone cannot influence total behavior. Moreover, all kinds of knowledge are not equally influential. The missing ingredient in this equation seems to be knowledge that is related to the affective or emotional world of the learner.
>
> What most often prompts action or behavior is a feeling or emotion about something rather than knowledge per se. It may be that "knowing about" can prompt feeling, but it is the feeling that generates behavior. Unless knowledge relates to feeling, it is unlikely to affect behavior appreciably. When education begins to make better use of this basic concept, we will have taken a giant step towards reducing the behavior gap ... (i.e., The discrepancy between much of the behavior of individuals in society and what they have been taught in school). [1]

All people have a combination of personal needs with which they continually attempt to deal in some satisfactory manner. These issues center around various needs, physical, psychological and sociological. Urban schools are under persistent stress to find solutions to increasingly chronic problems arising from unmet human needs. The affective function of instruction, if it is relevent, pertains to the effects of urban life on the emotions, the passions, the motives, the dispositions, the moral and aesthetic sensibilities, the capacity for feeling, attachment or detachment, concern, sympathy, and appreciation. The feelings of powerlessness, loss of identity, and diminished self image result from depersonalization due to size, diversity and bureaucratization as well as the pace of living, the massive shuffle and the lack of connectedness. What is needed are programs which will provide appropriately greater support for those who, due to circumstances beyond their control, are handicapped in body, spirit or concept so that they may someday be able to participate on equal terms in our National life.

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[1] Mario D. Fantini and Gerald Weinstein, "Reducing the Behavior Gap," NEA Journal, Vol. 57, Number 1 (January 1968), p.24

In addition to psychological and sociological needs of students, the urban school must also address itself to what the individual student will do after high school. A follow-up study of 1967 graduates (Exhibit II) shows that nearly 52.1 per cent of those who graduated in the District went on for additional education; 35.3 per cent immediately sought employment, and 6.4 per cent went into the military. The balance were engaged in a number of miscellaneous activities not shown in the Exhibit.

Those who do not complete high school are at an immediate disadvantage. Trends in occupational distribution since 1900 indicate a 32 percent decline in the availability of unskilled occupations while the demand for skilled, professional and technically trained people has increased significantly. Indications are that this trend will continue. (See Exhibit III)

Comparative life time earning based on educational attainment are shown in Exhibit IV. As can be ascertained, the more education the greater the likelihood of increased lifetime earnings. While it may not be desirable from the point of view of each individual student to go on for a college education, simple calculation reveals that those who do not finish high school will be earning from $1,000 to $2,000 less per year than if they at least finished high school. The declining market for unskilled workers and the resulting increase in competition for decreasingly available jobs will surely force some onto public assistance of some sort. No attempt has been made in this report to project the cost to society in terms of the probable increase in public expenditure for welfare payments, rising crime rate, public health programs, compensatory education or unemployment benefits. However, an estimate of probable lost earnings for one graduating class in the District School system because of under education has been calcuated. (Exhibit V) Multiplied in school districts throughout the United States, one can begin to see the staggering loss in earning power that results from under education. Surely a modern urban school, to be relevant, will have to deal with these problems and challenges.

4. AN EXTENSIVE STUDY OF EDUCATIONAL PARK PLANS IN MANY OTHER CITIES SHOWS THAT WHAT CONSTITUTED AN EDUCATIONAL PARK VARIES GREATLY FROM PLACE TO PLACE ACCORDING TO THE NEEDS OF THE INDIVIDUAL COMMUNITY.

A careful study has been made of various park proposals and a number of visits have been made to learn of these plans first hand. The results indicate that what constitutes an Educational Park varies greatly from place to place.

Educational Parks vary greatly in size. Parks have no consistent pattern in terms of the grades served. Parks are not oriented strictly to urban areas. The Nova complex is serving about 4,400 mostly white students in a facility fourteen miles outside of Fort Launderdale, Florida. Linear City in New York City is being designed to serve 34,000 students in an urban setting and will ultimately extend six miles along the right of way over railroad tracks. The Educational Plaza in East Orange, New Jersey, will be situated on a compact site and will serve that city's entire school population. A feasilibility study for Chicago suggests a"Cultural-Educational Park" which operates more on the principle of a "finger into the community." Rather than being situated on a compact contiguous "campus," Chicago's Cultural-Education Park is proposed as a cluster which integrates surrounding available institutions (museums, art centers, recreation centers, churches, business, etc.) into the educational components and treats them as a vital part of the resources available to the total educational complex.

The levels served in Educational Parks differ from place to place. The Nova School melds elementary, secondary, junior college, and university levels. The Campus Plan for Syracuse proposed to centralize eight elementary schools on a single site. Pittsburg's Great High Schools offer still another variation by increasing the size of high schools. Harry Passow, in his study of the District of Columbia Public Schools, recommended several experimental supplementary learning centers, each with a specialist function in addition to general curriculum offerings to serve primary, middle and/or secondary school children.

To project exactly the physical or numerical size of each Educational Park is difficult since a great number of variables will influence the final determination of each configuration. These variables include the logistics involved in transportation, scheduling and programming, the availability of large sites, the money and special needs of the clientele to be serviced, matters of public policy, and various psychological factors. All of these, and more, will influence the final configuration of a modern urban school.

This contention was borne out at a recent invitational work conference on Educational Parks, sponsored by Nova University in cooperation with the Ford Foundation's Educational Facilities Laboratories, the Nova Complex, and the United States Office of Education.

Participants generally agreed that it was next to impossible to "define" the Educational Park. They concluded that the Park concept must, of necessity," varying according to the needs and desires of individual communities" with a student body of whatever size would produce the most favorable educational situation. [1]

5. ALTHOUGH THERE ARE MANY REASONS WHY SCHOOL SYSTEMS CONSIDER BUILDING EDUCATIONAL PARKS, RELATIVELY FEW DETAILED STUDIES HAVE BEEN CONDUCTED WHICH SHOW SPECIFIC PROGRAM ADVANTAGES.

Decisions in cities like New York and Philadelphia assumed the existence of some program advantages, probably with some sound rationale, but were primarily a response to the need for breaking the pattern of racial isolation, which is a major problem for many large cities.

The need for greater integration, both socio-economic and racial, certainly exists in Washington. But as the Passow Report notes, the opportunities for integration are limited. With 93 percent Negro student population, it appears difficult to obtain any meaningful integration of race in the foreseeable future. There could be some meaningful integration,however, that reflects the existing Washington Community on a social and economic basis.

In the final analysis, what makes a school better, its teachers and programs or its racial composition? Many educators feel that is is the quality of its educational offerings more than racial or socio-economic mix that is the crucial element. One is not necessarily exclusive of the other but it should be reiterated that the basis for the social contract between the community, black and white, and the public schools is to provide the professional guidance and assistance children need and must have for productive and self-fulfilling lives.

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[1] Education Parks. Report of the Second Annual Nova University Conference. Nova University Press, 1968, p.73

A question basic to the evaluation of Passow's recommendations is the relationship which should obtain between school facilities and the students, teachers, and the community the school is expected to serve. Urban schools serve diverse populations. What do we expect of an urban school besides just "housing" students?

A. A MODERN URBAN SCHOOL MUST BE ONE WHICH STRENGTHENS THE INTERESTS OF THE STUDENTS, WHICH MORE OFTEN ADAPTS ITS PROGRAM TO THEIR NEEDS, RATHER THAN REQUIRING THE STUDENT ALWAYS TO ADJUST TO THE SCHOOL. GROUPING OF STUDENTS MUST TAKE INTO ACCOUNT THE SOCIAL MATURITY LEVEL OF EACH CHILD, HIS EMOTIONAL STABILITY, AS WELL AS HIS PARTICULAR NEEDS AND INTERESTS.

In Rhodesia, a child is considered ready for school when he can reach his left arm over his head and touch his right earlobe. In the light of what educators now know about the learning process, this makes as much sense as saying that chronological age should be the determining factor of learner readiness. One need only consider the child who, because of a lack of a few months in chronological age, is told to enroll in kindergarten or first grade the following year when he will then meet regulations. 1/ Consider also the child who, for one reason or another, performs poorly but is "passed" on to the next grade year after year because he is too tall, a discipline problem or is considered to be uneducable. These are administrative

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1/ Results of a survey published by the Educational Research Service on entrance age policies appearing in the ERS Circular (Nov. 5, 1968), revealed that 478 school districts out of 479 responding reported placing chronological age requirements on placement for first grade entrance. Only one school district reported that admission to first grade was based on individual evaluation of each child, p.3 (See Exhibit VI).

solutions to educational problems.

Children in a modern urban school should be grouped, not in the traditional fashion according to an unrealistic age/grade placement, but rather on the basis of ability, achievement levels, interests, social and emotional factors as well as chronological age. Children differ widely in their learning readiness, abilities, aptitudes and interests. Racial and economic factors are only two of numerous elements influencing these differences. The Passow Report recommends that the District Schools move toward some type of flexible grouping. Grouping of children should depend upon the interaction of several factors: the total student enrollment at a particular chronological age; the social maturity level each child has attained; the emotional stability of each child; the particular needs and interests of the child; and the probable interaction of the group on the individual, and the individual on the group.

The necessity for flexibility in grouping can easily be seen in Exhibit VII which shows the range of grade levels based on reading scores within three sixth grade classes in the District. Each of the three schools used for this Exhibit serves a student group drawn from very different socio-economic backgrounds; yet, this Exhibit shows that whatever the socio-economic mix, any "graded" group of students will range widely in the various subjects which they study. Grouping by age in classes is not sufficient; a school structure should facilitate, to the maximum degree possible, programs which permit each individiual child to advance at his own rate in order to achieve optimum educational opportunity.

Grouping should not be made, rigidly, only on the basis of achievement scores, specific disabilities, poor reading scores, etc., because such groupings are often psychologically damaging to children. Also, children grouped together on the basis of their common disabilities, tend to concentrate on these negative aspects and thus lose incentive, which is the *sine qua non* of learning. Similarly, those who have high achievement potential, unless challenged at their own rate, may lose interest. An urban school, in order to meet the unusual variety of needs of its students, should provide programs which take these considerations seriously and move towards non-gradedness. The school plant must support rather than impede movement toward such programs. Children must have a school which emphasizes their strengths and interests, which more often adapts its program to the students' needs, rather than requiring the student, in procrustean rigidity, always to adjust to the school.

B. A MODERN URBAN SCHOOL MUST PROVIDE AN OPPORTUNITY FOR TEACHERS TO FULLY REALIZE THEIR PROFESSIONAL POTENTIAL AND TRAINING. THE USE OF A VARIETY OF SUPPORTING STAFF AND SERVICES MUST BE MADE AVAILABLE TO PROVIDE THE TEACHER WITH A REPERTOIRE OF REFERRAL OR SUPPORT OPTIONS TO MEET A VARIETY OF LEARNER NEEDS.

What is the relationship between teachers, the quality of their teaching, and the buildings in which they teach? The Board of Education in one of its policy statements noted that,"... no amount of brick or hardware can supplant inspired teaching." The modern urban school must provide the kind of environment and space which will permit the inspired teaching the Board is seeking.

Under such circumstances and with the direction of such and with the direction of such teachers, each child will have the opportunity to realize his full potential.

The Passow Report observes, however, that the District Schools are not getting a sufficient number of such teachers. Furthermore, the report states that the improvement of education in the District of Columbia is primarily dependent on strengthening the quality of staff.

The Report shows that the quality of the school plant is one of the most important aspects in the attraction and retention of teachers. In fact, working in supportive, attractive facilities, according to this study is as important a recruitment factor as salary. The Report notes that the fear of discipline problems, and generally unpleasant environment drive away potential teachers. 1/

A study of factors influencing choice of school systems in the Washington Metropolitan Area by graduating education students, showed clearly that "excellent overall school facilities" ranked second among eleven choices as an attractive factor and was ranked above salary. Thus, a school system competes for teachers as much with its facilities and its supporting services, supplies, and equipment as it does with its salaries; in fact, these factors outweigh the salary, particularly when a system must seek teachers for inner city schools.

The school facilities must provide an opportunity for teachers to realize fully their professional potential and training; this, in

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1/ Passow Report p.134

turn, better serves the needs of their students. The school plant must accommodate supporting specialists such as speech therapists, reading specialists, psychological services, and those trained in special education. The new technology must be readily available to the teachers. Counselors, psychologists, additional administrative staff, medical personnel and parent aides should be available to provide the teacher with a repertoire of referral or support options. Too few or part-time supportive personnel limit teacher flexibility in dealing with learner problems. The immediate availability of full time referral or support personnel would increase these options.

Opportunities for interchange with other teachers and particularly with master teachers, should be a factor to be considered in master planning school facilities. In this way teachers who have acquired a degree of proficiency and professional competence can share these skills with less experienced teachers. It is important for the beginning staff to find assistance and direction built into the school program. This interchange is more valuable to the extent that a full range of educational and supporting competencies are available as part of the school and on a full time basis. This has major implications for school plant planning.

Extensive use of para-professionals, student teachers, et al., would permit the teacher to function in the area of her competence and with a degree of professionalism that could not but accrue to the benefit of the students and the community. The use of a variety of supporting staff and services, and the efficient use of this staff should be an important consideration in facility planning

In summary, it is felt by many educators that professional educational staff can be more fully and more effectively utilized in their field of speciality by reorganizing schools into larger complexes.

C. A MODERN URBAN SCHOOL MUST PROVIDE A WIDE VARIETY OF TOTAL COMMUNITY SERVICES. IT MUST BECOME THE FOCAL POINT FOR COMMUNITY LIFE CREATING NOT THE NEIGHBORHOOD SCHOOL OF THE PAST BUT THE SCHOOL NEIGHBORHOOD OF THE FUTURE.

Most school facilities are currently used for instructional purposes about 6 1/2 - 7 hours per day or 1200-1300 hours per year. 1/ Assuming an extended day schedule, however, the school plant could be made available from about 3600 to 4400 hours per year. 2/ Compared to its potential, the typical school is used only about 30-35 percent of the time. The community should get a better return on its investment and it will, if the school plant is designed to serve the total community as well as the student body. A school should provide many community services. The following are examples of programs or services that properly planned school facilities could provide:

1) employment counseling
2) comprehensive family health clinics
3) legal aid
4) information on family planning
5) activities to develop community leadership
6) cultural enrichment for all age groups
7) day-care facilities for prekindergarten children
8) senior citizens programs

1/ Student time allocation is currently based on the following: 6½ hours per day x 185 days = 1203 hours per year.

2/ Community time allocation is based on the following assumptions: 12 hours a day x 7 days per week = 84 hours/week or 4,380 hours/year allocated for community use.

9) social services
10) extensive community recreation facilities

The foregoing examples are general. In terms of Washington, D.C., a comprehensive profile of the community which makes up the Nation's Capital is necessary if the types and number of programs offered are to be relevant to actual, present needs. Exhibit VIII indicates some of the kinds of data needed in order to make rational decisions for planning a community service-centered Educational Park in Washington, D.C.

But very little of this can occur without appropriate facilities. The school plant should provide the community with facilities such as libraries, gymnasiums, meeting rooms, all-purpose rooms, swimming pools, and other athletic facilities. Small and large theaters,arts, and crafts rooms, shops, and music facilities should also be available to provide vocational and avocational classes. Thus, the school can "promote the general welfare" by responding to a wide range of general interests for citizens of all ages. Surely, these facilities would add immeasurably to the richness and satisfaction of urban living.

6. THE WEIGHT OF A CONSIDERABLE BODY OF COMPETENT PROFESSIONAL JUDGEMENT INDICATES THAT SUBSTANTIAL EDUCATIONAL ADVANTAGES CAN BE DERIVED FROM EDUCATIONAL PARKS.

A number of school systems throughout the country have made extensive studies on the kind of educational opportunities which should be available in the urban school, opportunities which do not seem economically feasible in the present school structure. Specialists in the District of Columbia School System as well as educational experts outside the school system were consulted in the course of this study. (See Exhibit IX). Much of the information has been collated in the following summary of program advantages which could reasonably be expected in the community centered Educational Park.

A considerable body of competent professional judgement indicates that the Educational Park concept appears to best meet the, total educational and professional requirements of students, teachers and community and to meet them more economically in terms of time, personnel and use of facilities.

Music and Art

Some of the most severe criticisms of the District of Columbia Schools in the recent Passow Report are aimed at the music and art programs as presently existing in the schools. These areas which should provide enrichment and opportunity for creative expression are having the very opposite effect in the traditional crowded urban school. A larger school could offer provision for rich and varied music and art education for more children at all age levels. The Park should allow the opportunity for a greater number of pupils to have access to various kinds of music and a variety of instruments. These rich and varied programs should be available for the community to share, as both audience and participants. Art, too, which is the "native tongue" of the young could be introduced and carried on in greater variety and depth than is now possible. The interrelationships between music, art, language, and other aspects of life could be better seen and experienced in such a complex. Excellent facilities would help attract the quality of staff recommended by the Passow Report.

Foreign Language

The Passow Study judged the foreign language teaching in the District of Columbia Public Schools as "uneven." Particular attention was devoted to the "moderately inadequate" facilities and equipment. These deficiences together with others noted of the teaching personnel, paint a rather depressing picture of this important area of education. The difficulties of justifying, recruiting and holding trained personnel and of purchasing expensive laboratory and other equipment will not easily be resolved so long as the number of potential enrollees by available student groups remains small, as is the case in the neighborhood school. The Educational Park, because of increased student enrollment, could be designed to utilize more efficiently additional equipment, laboratory facilities, and trained specialists. In this way, the numerous advantages to be derived from a rich foreign language program could be made available to more students in the District Schools. Indeed, a language program offering ten, twelve, or fourteen languages rather than three, four, or five is feasible. In a major international center such as Washington, this is most desirable.

Mathematics

The study and thorough understanding of mathematics is vital in today's highly technical society. New trends in mathematics and the specialists required to communicate mathematical skills to students demand a high level of competence at all levels of the curriculum that is difficult to achieve in the traditional school situation. Remedial mathematics services as well as more varied and advanced programs are needed. For example, members of the District of Columbia supervisory staff for mathematics have indicated that the use of diagnostic clinics and "prescription learning" in this field could dramatically improve performance of students with specific problems in mathematics. Also, courses in advanced mathematics, statistical inference, etc., should be readily available to all students with appropriate aptitudes and interests. To implement such a program now would be costly because of inefficient use of services. However, a larger concentration of students in an Educational Park could eliminate much duplication of staff and could justify employment of specialized staff because they would be utilized efficiently, thereby reducing the overall program cost while rendering a vitally needed student service.

Physical Education

The need for a strong physical education program with all of its facets is so obvious in urban schools as to need no justification. Facilities for such programs, however, are seriously restricted especially on the elementary school level. Extensive indoor and outdoor facilities in an Educational Park could provide a sharp contrast to the crowded and often inadequate space so often allotted to the physical education program in the neighborhood school. Clearly the problem in providing a full range of facilities at each neighborhood school has been economic; the cost could not be justified on a low utilization basis. Assuming a higher level of utilization, such as would be possible in a larger school, varied facilities could be made available, and it should be noted that these facilities may be used by the entire community on a year-round basis.

Language Arts

Perhaps the most important skill to be mastered by today's students is the ability to read and read well. Reading, listening, speaking, and writing are all parts of this communications program. Fine work has been done by both the English department and the Reading Clinic in endeavoring to provide specialists and special facilities for Washington's public school children. A larger student enrollment would make possible the better utilization of highly skilled personnel and specialized supporting facilities which a comprehensive language arts program should have to operate most effectively.

Science

One of the most expensive areas to equip adequately is the area of science. Yet, in today's technological society, an awareness of science, scientific principles, and the tools of science is a vital ingredient in the student's knowledge. The average small school is severely handicapped in providing the kinds of equipment and facilities necessary to achieve this result. Similar limitations appear in the endeavor to secure qualified specialists in the science field. The Educational Park, with its larger student enrollment, can make possible the establishment of such facilities. Improved facilities, in turn, would help attract qualified specialist teachers. As in other areas of the curriculum, such programs and facilities will offer this opportunity for the reeducation of some of those in the community who presently suffer unemployment or underemployment because of lack of basic skills.

A much wider variety of science courses and applications of science would be possible in the Educational Park. Highly trained scientists could be available to the school and

> to its large student population because their talents can be utilized more efficiently than is possible in the smaller neighborhood school.
>
> Special Education
>
> "Special education is concerned with providing adequate programs for children with mental and physical disabilities." The clustering of special education teachers, administrative staff and medical personnel, would create optimum conditions for planning, curriculum development, in-service training, and improving communication between teachers and administrators. Full supporting school services, medical psychological, and social, can be provided and most important, can be provided when needed, and used efficiently. Facilities and staff thus made available for the total Educational Park population would eliminate the necessity of constantly "segregating" children in special education programs. The best thinking in special education is to maximize the students' opportunities to participate in programs and activities with the majority of students; to learn to live with those who are not handicapped. Educational Parks offer major improvements in these opportunities, while offering all the advantages of grouping for use of specialized staff and facilities. Thus the Park offers particular advantage for special education.

Similar statements to those appearing above could be made for virtually every program or subject area. These examples, containing program suggestions from D.C. Public School subject area specialists, are preliminary by nature. Master planning must include the development of vastly more detailed educational specifications.

7. PROFESSIONAL JUDGEMENT OF EDUCATORS AS WELL AS SOME SPECIFIC STUDIES OF PROGRAM FACTORS INDICATE THAT LARGER SCHOOL ENROLLMENTS OFFER THE POSSIBILITY OF SUBSTANTIALLY IMPROVED EDUCATIONAL PROGRAM OFFERINGS.

The key question in determining whether or not to move into the Educational Park is whether or not sufficient program advantages can be obtained in larger school complexes. Some specific studies of program factors indicate that substantial educational and community advantages can be derived from larger school complexes.

For example, larger student enrollments can allow a school to employ, on a full time basis, highly specialized staff who could not be utilized as efficiently (or perhaps not at all) in a school with a smaller enrollment. Exhibit X at the end of this report, shows the percent of students, or enrollees, who might be generated from a variety of different size student bodies. As the Exhibit shows, the smaller the percentage of students enrolling in a given course, the larger the student population must be to justify the staffing of the course as well as any specialized facilities needed to support the educational program.

For example, a student population of about 5,000 pupils would make it possible to offer a specialized foreign language on a full time basis if as many as two percent of the enrollment wanted to take the language. The language could be offered for as small a number as 1 percent if 10,000 students were included in the complex.

Similarly, specialized facilities, such as science laboratories, planetariums, swimming pools or extensive electronically equipped study and reference areas could be justified with different size enrollments; some of these facilities may require 8,000 to 10,000 students to ensure full utilization. Exhibit XI shows the estimated numbers of students needed to utilize fully special facilities. For example, if only 2 percent of a student population were to utilize a special facility such as an excellent planetarium or well equipped zoological laboratory, it would appear that this facility could be utilized fully by a student population of approximately 7,800. This Exhibit further demonstrates the student enrollments required to secure maximum utilization from specialized facilities and space based on varying percentages of students using these facilities. A facility used by only 3 percent of the student population would require enrollment of approximately 5,200. Assuming major use of these facilities by upper secondary students, the dimensions of enrollments needed for full utilization come into perspective. Exhibit XII shows the estimated number of students needed for full staff utilization. It should be noted that these are preliminary estimates. Since the programs and facilities are not now generally available, it is necessary to estimate the demand for these resources. Examples of such estimates in relation to special staff competencies and facilities are found in Exhibit XIII. A means of estimating the number of students to utilize these resources is also shown and explained in appropriate foot notes in that Exhibit. These figures show that the Educational Park, with larger student enrollments, can provide for the kinds of programs various professionals felt were desirable, and do it in an economically feasible manner by maximizing efficiency of utilization.

8. PROFESSIONAL JUDGEMENT ON COMMUNITY SERVICES AS WELL AS SOME SPECIFIC STUDIES OF COMMUNITY SERVICE FACTORS INDICATES THAT FACILITIES AND PERSONNEL IN A COMPLEX SUCH AS THE EDUCATIONAL PARK WILL WORK FOR GREATER EFFICIENCY AND SERVICE OF THE COMMUNITY.

In the judgment of competent professionals throughout the country currently working with the concept, the Educational Park is seen as a creative way of maximizing efficient cooperation between educational and community services. The many services a model urban school should provide for the total community which it serves have been discussed previously. But providing such services in a comprehensive way is expensive in terms of the individual school. The Educational Park, with its large student population, would bring within the complex correspondingly large numbers of adults whose needs might be met more efficiently than is currently possible. The public schools have unparalleled access to knowledge of the needs of children and their families. Thus, the school may provide a means to introduce families to services which may assist them and their children and, in addition, make this introduction with dignity.

An example of common services could include a health center. The Park's health center could have not only an infirmary for emergencies, but an extensive preventive medical and dental facility and program, testing and following the children's health progress throughout all their years of school, while at the same time, keeping a close check on family health patterns. These health centers might be satellite units of hospitals. Doctors, nurses, psychiatrists, social workers, guidance people can all be housed in the Park. However, if the health and other community needs are to be realistically met in this new complex, service facilities for the Educational Park must be more rationally planned than is currently the case. Funds personnel, and facilities are often allocated on the basis of availability rather than on the basis of a long range plan. The Park cannot do everything. Unlimited demand must be matched against limited resources. Priorities must be established in service as well as educational areas.

A series of exhibits at the conclusion of this report attempts to show in a preliminary way some areas of need in the Washington community. Exhibit XI is a summary of health characteristics of low income families based on nationwide surveys of the National Center of Health Statistics. The exhibits which follow (Exhibits XV, XVI, and XVII) give the national figures on various health characteristics. This is a beginning. It will be necessary to relate this and other data to the Washington, D.C. community and, in particular, to that area of the city where the Park will be located. Exhibits XVIII and XIX attempt to do this on a limited scale. Then it should be possible to make a rational estimate both of the service needs of the community and the means available to meet these needs. The D.C. Department of Public Health might well participate in planning and operating such a facility. Welfare, vocational rehabilitation, legal aid, and other community agencies could also participate as appropriate.

It is possible to make some reliable estimates of staff and facilities utilization factors which influence the efficent use of community services. By making some assumptions relative to frequency of utilization, staff requirements, and similar factors, the Park Staff has prepared a series of exhibits (Exhibits XX, XXI, and XXII) which indicate "optimum levels" of community service. Conferences were held with various members of the professional community and several professional organizations were contacted relative to the preparation of these estimates. (See Exhibit XXIII) It is the conviction of the Staff that studies such as these must be more thoroughly developed if the Educational Park is to provide the maximum of service to the community.

But health services are only one of the facets of total community service. Libraries are another example of a community service facility. But to provide service to the community as well as to the students, a library must be specially designed, equipped, and staffed. Only in this way can the library be seriously considered to meet community needs. Shop and craft facilities used by students during the school day might well be equipped and staffed so as to provide full utilization during the after school and evening hours and on non-school days for adults in the community. In the present organization of neighborhood schools such facilities which do exist are often too limited to provide a full range of community services. The establishment of a large Park complex in a central area would do much to make these facilities, much enlarged and more adequately staffed, more attractive and useful to the citizens of the Washington community.

9. THE EDUCATIONAL PARK APPEARS TO MEET THE TOTAL EDUCATIONAL AND COMMUNITY SERVICE REQUIREMENTS OF A MODERN URBAN SCHOOL AND TO MEET THESE MORE ECONOMICALLY.

The Park Staff has not attempted to put a price tag on an Educational Park tailored to the requirements of Washington, D.C. Detailed and realistic cost estimates should be developed by the Board of Education planners and selected architects once educational and community service specifications and levels of service for the first Park are determined.

Preliminary cost studies made at the Michigan State University College of Education for the city of Chicago, indicate that construction costs for Educational Parks, using the same educational specifications and the same levels of quality, would be less by some eight to ten percent than the construction cost for separate traditional schools. 1/ Based on the estimated cost of the District's present six-year school construction program of over $200,000,000, perhaps $20,000,000 could be saved.

A study of the age of Public School buildings in the District of Columbia reveals that 37% were built before 1920 or nearly 50 years ago. 65% were built before 1940, while several schools, still in use, were opened when Ulysees S. Grant was President of the United States. (See Exhibit XXIV)

Age alone, however, is not the whole story. A physical plant that is fifty years old or even older may not necessarily be obsolete. If the function remains the same and the structure is sound, the building might be considered useable. Of course, the functions of schools, like other structures, do change in relation to changing needs. Few things are certain in education, except the probability that there will be continued and accelerated change. What is needed, then, is a built-in accomodation to change.

Actual costs, however, may be significantly reduced in those areas where existing modern educational physical plants and facilities

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1/Donald J. Leu and I. Carl Candoli. A Feasibility Study of the "Cultural-Educational Park" For Chicago, College of Education, Michigan State University, February, 1968.

may be incorporated into the Educational Park complex. Consideration of the use of some of these schools is to be found in Statement 14 near the end of this report.

However existing cost figures frequently ignore the fact that when the Boards of Education move toward the Educational Park they are trying to create something more than the conventional building--specialized services and facilities that can only be justified by a large enrollment. The overall cost, then, will increase as the planetariums, the swimming pools and extensive media centers are written into the educational specifications; in other words, as the curriculum is enriched, as facilities are added, as educational opportunity increases and goes up. Though the final per pupil cost may approximate present levels, the evidence indicates that considerably greater educational opportunity is being purchased per dollar invested. Thus, the Park Staff does not view the Park concept as being a cheaper method of providing present programs, but rather as an economical approach to improving educational programs to a degree that may offer substantial relief to the District's interrelated educational, social and economic problems.

10. STUDY OF PROGRAM AND FACILITY UTILIZATION FACTORS SEEMS TO INDICATE THAT THE ESTABLISHMENT OF A COMMUNITY SERVICE-CENTERED EDUCATIONAL PARK OF ABOUT 18,000 - 20,000 STUDENTS FROM EARLY CHILDHOOD TO GRADE TWELVE WOULD BE ADVISABLE FOR WASHINGTON,D.C.

The Park Staff believes that there is soundly developed evidence that substantially improved educational programs and supporting community services can probably be developed in larger educational park complexes.

Assuming the desirability of expanded program offerings on the high school level, it would appear that a senior high or upper school complex serving what is now a traditional four-year high school, grades nine to twelve, and probably enrolling approximately 8,000 - 10,000 students, is feasible for Washington, D.C. The numbers necessary to obtain the program advantages in the upper school seem to support this level of studnet enrollment.

The middle school grouping, grades five, six, seven, and eight, would probably require a smaller student group in order to obtain equivalent educational advantages and is recommended at about 6,000 - 7,000 students.

The Passow Report does not recommend grading by ability for lower elementary and certainly not for prekindergarten and early childhood groups. However, this does not preclude, for example, a system of individually prescribed instruction. Unlike older children, these groups cannot be expected to travel as far to school. In terms of gaining full utilization of specialized facilities in support of these programs, it appears that units of perhaps 3,000 would be desirable in order to provide highly individualized instruction for these age groups.

The very early childhood education groups, including day-care centers, ages 2, 3, and 4, might not necessarily be part of the Park complex. Day-care facilities and even prekindergarten might well be located in smaller units, even in the basement of housing projects in which proximity to the home would be paramount. Trips to the larger complex might be planned for these groups, but the children would not necessarily have to be housed in this central facility. However, provision for early childhood education should be a part of this first experimental Park to service those in the immediate neighborhood and to provide for others whose parents may wish to bring their children to the units located there.

As steps are taken to develop a master plan of Educational Parks for the District of Columbia, consideration should be given to a variety of Parks. Throughout the country today, cities are considering total school Parks, Secondary School Parks, Middle School Parks, and combinations of these. In the future it may be found that variations of this type may be desirable for the District. At present, however, it is the opinion of the Park Staff that the initial Park should be a total early childhood through grade twelve Park as described above.

Whatever the pattern of Parks which emerges in the District, consideration should be given to providing adequate community facilities at each site. The nature of each Park, elementary, elementary-middle school, or elementary-middle school-high school, or middle school-high school, each should involve a sufficiently large student population to support such services.

11. A POSSIBLE ALTERNATIVE TO THE ABOVE PROPOSAL WOULD BE THE ESTABLISHMENT OF ONE 14,000 - 16,000 COMMUNITY SERVICE-CENTERED EDUCATIONAL PARK FOR MIDDLE AND HIGH SCHOOL STUDENTS.

As an alternative to the total Park, the Park Staff recommends for consideration the establishment of one experimental Educational Park for middle school, grades 5-8, and high school students.

Diversified program advantages and specialized facilities can well be demonstrated at this level. An additional advantage to such a Park, would derive from the age of the students. Assuming that some traveling may be involved for students to reach the Park site, older children are more easily able to adjust to this schedule; indeed many students now travel substantial distances voluntarily, and parents are more willing to permit them to do so than with younger children.

The size of the Park population as given here would provide the opportunity to make use of the large student populations necessary for program advantages and full facility utilization on the middle school and senior high level. In this way, concrete evidence of effectiveness could be expected and would provide essential experience upon which to base future plans.

12. THE EXPERIMENTAL EDUCATIONAL PARK SHOULD BE DESIGNED IN SUCH A WAY AS TO SERVE ITS OWN COMMUNITY WHILE AT THE SAME TIME OFFERING SERVICES TO SUPPLEMENT THE ENTIRE DISTRICT OF COLUMBIA SCHOOL SYSTEM.

The Passow Report recommends the establishment of supplementary Learning Centers. These are to be understood as additional highly specialized programs offered at each Park Complex in addition to the regular curriculum. Each Educational Park, beginning with the first, would have a rich and varied general curriculum and would also highlight some area of specialization; for example, an area of the sciences, languages, the arts or vocational or technical skills. In this way students from other sections of the District could attend these centers for periods of time in order to supplement the program available in their school. Eventually, students from neighboring suburban communities might also be attracted by the outstanding programs of such a supplementary Learning Center. The plans for the Educational Park require development of highly specialized programs. By planning the first Park as a supplementary Center, some of the advantages of the Park program could be shared by students throughout the District and thus benefit the whole school system.

The planning and scheduling of such a Learning Center must be considered carefully. First, the Educational Park if it is to serve also as a Learning Center, must be planned to serve an appropriately larger number of students. The Parks must be located at the center of public transportation if students from all sections of the District are to benefit. For example, if such a Center is contemplated, a location near Union Station would appear to be most desirable. This particular location will be discussed later in this report.

Finally, the schools must be prepared to adjust concepts of scheduling from periods to days, perhaps to weeks. Shuttling students to and from school during each day appears to be wasteful of student time, difficult to schedule, and unnecessarily expensive. Students could be assigned for a day or for several days at such a Learning Center. Clearly, the tradition of the seven period day must be breached if new learning concepts are to be successfully implemented. There appears to be no reason why this change cannot be made. Flexible scheduling to date has emphasized the use of time blocks of less than a standard period, for example modules of 10, 15, or 20 minutes. This represents a trend toward "microscheduling." It is suggested that the supplemental Centers will require large block scheduling. Logically and educationally, there seems to be good reason to look for systems of "macroscheduling" to develop the effectiveness of the Learning Center. Indeed, scheduling by days or weeks may offer substantial benefits to the present rather rigid seven period per day type scheduling and to complicated microscheduling efforts.

It should be observed most carefully that the supplemental Learning Center could be useful as a means for breaking the pattern of substantial socio-economic and almost total racial isolation for most District students. In particular, it might break this pattern as a part of a process which allows all students to share in and to benefit from exceptionally fine educational opportunities. The reduction of racial and socio-economic isolation can occur as a desirable by-product of educational progress. It would appear that this approach could be more effective than many other proposals, since it builds on legitimate common educational interests and experiences rather than the superficial logistics and statistics of mixing diverse student populations.

13. THE PRESENT SCHOOL CONSTRUCTION PROGRAM SHOULD BE RECAST (1) TO RAPIDLY ELIMINATE OVERCROWDING, UTILIZING RELOCATABLE UNITS WHENEVER POSSIBLE AND (2) TO ORIENT NEW PERMANENT CONSTRUCTION TOWARD CREATION OF PARK COMPLEXES.

The probable educational-community advantages of constructing larger Educational Park complexes present some basic and critical questions concerning the present District School construction program. The Park represents the school of the future; it is the next logical step in the evolution from the one-room schoolhouse to larger units which could offer program advantages in an economical manner; it is a major step in this evolutionary process, and there are many questions which must still be resolved. Many schools in the District suffer from serious overcrowding; space is not yet generally available to support recent and basic program improvements such as increased counseling service and library facilities. A major reorientation of the school construction program will take time and delay the facility improvements now included in the D.C. School's Six Year Construction Program. Thus, if the Board of Education should approve this recommendation, a plan must be developed to allow for an orderly transition from the present six-year building plan to one which incorporates the Educational Park concept. The question: How do we get from the present plan to the future plan and still meet current critical facility requirements?

Present facility requirements fall into several basic categories. Our most pressing requests are for space to eliminate overcrowding and obsolete facilities (see Exhibits XXIV, XXV and XXVI). Our least pressing requests are those to allow for improved class size and to provide facilities for special programs, though, in the long run, these are equally important. It is recommended that every effort be made to eliminate serious overcrowding and that no important delay in present construction plans should be authorized which might hamper achievement of that objective. However, to the maximum possible extent, relocatable facilities should be used to meet immediate needs, since these are less expensive and can be obtained more rapidly. Relocatable units also should be used to provide additional space to support program improvements. For example, a relocatable unit could allow a classroom in a school to be converted into a library, a science-crafts room, a music room, or a special guidance-health room. In this way, relocatables may meet the most urgent overcrowding and program demands. This is a fair and economical solution to gain time for improved planning. Simultaneously, it can alleviate the most pressing facilities problems.

A study of present permanent construction plans should be initiated to develop, hopefully within a year, a plan based on construction of the larger Park units. Several questions and factors should be considered in doing this:

1) How will present school facilities fit into the new pattern? What alternative public and private uses of present school plants can be developed? For example, can a school site and/or school building be used to help solve housing problems? What is the market value of a school which is no longer to be used as a school? Great care must be taken to develop plans with consideration towards the serious funding problems and the great demands for public services now confronting the District. Certainly some prudent compromises between the future promise of the Park concept and present urgent demands should be developed.

2) The proposed use of senior high, middle school, and elementary Parks, and the development of prekindergarten programs will require a redevelopment of program and facilities requirements for each level and a projection of these needs throughout the city.

3) The entire program should be staged over perhaps a 10 to 20 year period. The development of the experimental unit will probably require 4 to 6 years. Thus many relatively new school plants, for example, 10 or 15 years old, may have provided 20 to 35 years of use before elimination, thereby providing an economical period of service to the District.

4) The Educational Park must provide for major program flexibility. However, it is not reasonable to expect all teachers to change from present practices to what is generally accepted as more desirable practice simply because of a change in school design. For example, many teachers will teach in teams in a few years, but this will be an evolutionary change. The Park must be built on the assumption that it will accomodate change not on the assumption that change has occurred. Curriculum

is not a document or a directive from a central office but rather it is the way teachers actually teach children. Change will not occur because of buildings or curriculum guides but only as the staff reorients its thinking. A building can hamper change; it cannot create change. Structural change must be planned to facilitate staff and ultimately pupil change. Surely, there are many other factors which must be considered in master planning, but these appear to be of particular concern.

14. THE D.C. SCHOOL SYSTEM NOW HAS A NUMBER OF SCHOOL COMPLEXES WHICH MAY BE USED AS THE NUCLEI FOR DEVELOPING EDUCATIONAL PARKS. CLUSTERS OF BUILDINGS, HOWEVER, ARE NOT EDUCATIONAL PARKS. NEW FORMS OF ORGANIZATION AND NEW TYPES OF SPACE SHOULD BE INVESTIGATED.

The development of Educational Parks in the District is not as radical a departure from present plans as might first appear. Actually, the District has grouped schools into clusters in a number of locations within the city. (See Exhibit XXVII) These clusters might well serve as the nuclei for the construction of Educational Parks.

While the size of enrollment on any of these complexes could not readily be increased without substantial expansion, consideration must be given in the selection process to an area which would allow expansion to a larger student enrollment at some time in the not too distant future. The following sections list six locations which appear to have the greatest potential and describes each briefly.

McKinley Site — Exhibit XXVIII gives the projected 1968-1969 enrollment for McKinley and surrounding schools which might be drawn into this plan. There are four significant factors which draw attention to McKinley. These are: 1) it has the possibility of practically unlimited expansion using air rights over the adjacent freight years; 2) it could make use of existing good facilities; 3) it could have all grade levels represented; and 4) its proximity to existing major railroad and automobile transporation routes casts it in the potential role of a metropolitan Educational Park.

Spingarn Site. -- Exhibit XXVIII gives the projected enrollment figures for Spingarn High School and adjacent schools. There are four significant factors which draw attention to this site. These are: 1) it has ample room for additional expansion, 2) it could have all grade levels represented; 3) the Phelps Vocational School is located there, and 4) it is adjacent to extensive Public Park land and the Anacostia River.

Roosevelt Site. -- (See Exhibit XXVIII) There are five significant factors which draw attention to Roosevelt. These include: 1) it has space for additional expansion; 2) it could have all grade levels represented; 3) the Burdick Vocational High School is located there; 4) the Sharpe Health School is adjacent, and 5) it is near major automobile transportation routes.

Western Site. -- Projected 1968-1969 enrollment figures are given in Exhibit XXVIII. The Park Staff found this site of interest for the following reasons: 1) existing good facilties; 2) ready accessability by existing transportation routes, and 3) excellent location in the Georgetown area. Considerable study of this site has already been made including consideration of additional land acquisition and Western's potential development as an Educational Park. 1/

Coolidge Site. -- Projected 1968-1969 enrollment figures for the Coolidge Complex are shown in Exhibit XXVIII. The Coolidge site has several attractive features: 1) it is located near existing good transportation

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1/ Engelhardt, Engelhart and Leggett. Proposals made to the Board of Education of Washington, D.C., Regarding the Feasibility of Modernizing, Adding to, and Reviewing Western High School, April, 1968.

routes; 2) its proximity to the Baltimore and Ohio Railroad presents an additional interesting feature to its metropolitan accessibility; 3) it is adjacent to a large recreation center, and 4) there is potential for considerable expansion.

Anacostia Site. -- Exhibit XXVIII gives the projected 1968-1969 enrollment figures for Anacostia and surrounding schools which might be drawn into this plan. Anacostia High School is of interest because: 1) it is located in the far Southeast section of Washington thus adding "geographical extension" to the Park plan; 2) it is the proposed site for the Anacostia Project ($10 million project) which, if it proves successful, will require a new physical plant to house the innovative educational programs being developed, and 3) it has ample space for expansion if air rights over the railroad and Anacostia Freeway are utilized as well as D.C. Recreation land opposite the Freeway. In relation to this last point, the National Capital Planning Commission's Proposed Comprehensive Plan for the National Capital (February, 1967) includes plans for the development of this area adjacent to the Anacostia High School. Tentative plans of the D.C. Recreation Department for this same area have been designed by Bryan Scriven and Roger Katan and are of particular interest. 2/

These examples of existing clusters of schools in the District represent, in the opinion of the Park Staff, those sites with the most potential for development into Educational Parks. It should be noted however, that clusters of buildings are not Educational Parks. The principal differences between these clusters as they now exist and an

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2/ "Washington's Light-Hearted Park Places" Progressive Architecture. August, 1968, pp. 144-45.

Educational Park include: 1) size of enrollment, 2) absence of shared core facilities, 3) absence of administrative coordination, 4) limited and dispersed technological resources and 5) the lack of sufficient educational specialists and non-teaching professionals.

The land area of the District of Columbia is fixed. Sites for additional school construction within the District are sharply restricted by the density of population causing severe relocation problems, high land cost, and competition for space urgently needed for new housing. Consequently, this land must be used efficiently in order to meet the varied and increasing demands being placed on the city and to avoid conflicts among land uses. New forms of organization and new types of space should be investigated. For this reason, the Park Staff wishes to call particular attention to the existence of many miles of unencumbered building sites in the District of Columbia if the air rights over railroad tracks, freight yards, and railroad yards are used. 1/ (See Exhibit XXIX) Some reasons for considering these site possibilities are:

1) These areas represent an untapped reservoir of land within the city.
2) Air rights are commonly used in some cities and their use has been shown to be feasible.
3) Parks built over the tracks belong neither to the city nor the suburb but have the potential of serving both.
4) The character of Parks built in such areas are not predetermined but can be anything the planners choose to make them.
5) Structures built over the tracks can extend along the tracks as far as needed, providing almost unlimited expansion.

1/ Dr. Max Wolff Draft Proposal for Park Development, Washington, D.C., June 16, 1967.

6) Transportation can be self-contained by mono-rail under the Park, or by the use of special trains on the regular track.

7) Construction of schools along the right of way of the tracks can be intermeshed with the existing community and future housing which could be constructed over the tracks.

8) Each center can base itself on the uniqueness of the facilities nearby.

In relation to this last point, the freight yard center near the present McKinley High School might emphasize science and technology by greatly expanding its present technical program; a Potomac center, built over freight yards adjacent to the Washington Channel, could specialize in the performing arts, utilizing the proposed John F. Kennedy Cultural Center nearby; the Union Station center could emphasize the study of the social sciences and government with Capitol Hill for its field work. This last site possibility, because of its high visibility merits special consideration.

Exhibit XXIX shows the interrelationship of the railroad and the proposed subway system in relation to the location of potential Educational Parks, most of which would utilize air rights in construction and thereby minimize the necessity of relocating residents. Thus, it appears possible to move toward Park complexes in the District of Columbia in a variety of ways.

15. THE DEVELOPMENT OF AN EXPERIMENTAL EDUCATIONAL PARK AND SUPPLEMENTARY LEARNING CENTER IN THE NATION'S CAPITAL WOULD BE OF NATIONAL AS WELL AS LOCAL SIGNIFICANCE AND THUS FUNDING OF THE FIRST PARK COULD BE SHARED BY THE DISTRICT AND THE FEDERAL GOVERNMENT.

Washington, D.C. plays numerous roles. To its more than 800,000 residents it serves as home. For these people and many others, it is a place of employment, education, recreation and a host of other activities. For them, Washington must be a good place to live and work. Washington is also the Capital City of a great Nation and the seat of the Federal Government. Millions of people from all over the Nation visit Washington and educators from abroad and from all the States come to the Washington educational community and, in particular, to the United States Office of Education to seek professional advice and counsel. Education is of national concern and the Federal role in education is expanding.

In light of this broad concern for education and the high visibility of Washington, D.C., the selection of the site for the first experimental Educational Park assumes special importance. In the opinion of the Park Staff the area which best meets this criteria is in the immediate vicinity of Capitol Hill. Planning is currently underway for the establishment of a National Visitors' Center at Union Station. There are a number of sound reasons why consideration should be given to the Union Station site for the first Educational Park.

A Union Station site could be situated adjacent to the National Visitors' Center and allow controlled accessibility by interested individuals from all areas of the country. Its proximity to Capitol Hill would place a modern educational institution--an operational model--within easy walking distance of the Nation's legislative halls.

The Union Station Learning Center could provide an opportunity for extensive work in the Social Sciences, especially government, for all students of the District as well as those from the immediate attendance area of the Park.

The Union Station site is located in the heart of the City, an area which is a focal point of many contemporary urban problems. A school dedicated to excellence in urban education and relevance to urban problems would be strategically and appropriately located there. Additionally, a mixed racial and socio-economic population surround Capitol Hill and nearby areas and appropriate integration could be fostered in this Park.

Housing is one of the biggest problems in Washington, D.C. Since the housing situation is so crucial, ways of creating new land to build housing, as well as schools and Government facilities should be explored. The railroad tracks behind Union Station offer a potential for almost unlimited expansion for an Educational Park if air space is utilized in construction. The use of such an untapped reservoir of land in a densely populated area of the city could eliminate the painful necessity of relocating residents and would afford an unusual opportunity to coordinate and integrate residential, educational, governmental and perhaps commercial units into the surrounding neighborhoods while simultaneously building schools in an area of great need.

Easy accessibility on existing transportation routes is a significant factor in planning a complex such as an Educational Park. The Union Station site offers considerable advantages in this area. Union Station is easily accessible on existing major thoroughfares and its accessibility will increase with the completion of the Center Leg of the Inner Loop Freeway which is nearby. Transport by bus to and from Union Station to most points in Washington is excellent. Completion of the proposed Metro subway will see Union Station become the hub of a metropolitan transportation system.

As shown in Exhibit XXIX an Educational Park located at Union Station could serve students from all parts of the District and has the added potential of expansion into a series of rail linked Education Parks if this is later seen as desirable.

Emphasizing the uniqueness of the District's position in the Nation's Capital, the Board of Education has asserted that:

> The District of Columbia Public School System has an obligation unique among this Nation's school systems. As the school system serving the Nation's Capital, it bears an obligation to demonstrate that the equality of educational opportunity is not a theory but actually exists; that this affluent Nation does not just preach concern for the individual but that the least of its citizens is offered the best of its opportunities.

The Park Staff believes that Educational Park can be a place where this expression of hope may come to realization.

16. THE FINDINGS OF THE TASK FORCE ON EDUCATIONAL PARKS AND SUPPLEMENTARY LEARNING CENTERS AND THE RECOMMENDATIONS OF THE EDUCATIONAL PARK ADVISORY COUNCIL OF CONSULTANTS HELPED THE SUPERINTENDENT OF SCHOOLS AND THE BOARD OF EDUCATION TO GIVE THE REQUEST FOR EDUCATIONAL PARK PLANNING FUNDS AN EXTREMELY HIGH PRIORITY IN THE FY 70 CAPITAL OUTLAY BUDGET FOR THE D. C. PUBLIC SCHOOLS.

In accordance with its obligations to the Executive Study Group of the Board of Education, the Park Staff and consultants prepared a report on Educational Parks and Supplementary Learning Centers. The project report and its recommendations, growing out of Phase I, have been reviewed by the Executive Study Group, the Superintendent, and the Board of Education. The recommendations to the Executive Study Group are contained in Appendix A.

At the July 30, 1968 special meeting of the Board of Education, the Superintendent, acting on the approval of the Board, directed school officials to "seek funding for the development of educational park and community service specifications for the first community service educational park and to conduct a feasibility study of projected school construction that would consider as one alternative, the development of educational parks city-wide." In March, 1969 the Board placed the request for Educational Park planning as priority two in the FY 70 Capital Outlay Budget. A chronological summary of Educational Park development in the Nation's Capital may be found in Appendix B.

On May 12, 1969, the Superintendent of Schools read a statement prepared by the Park Staff and the Educational Park Advisory Council in support of the request for Educational Park planning funds in the FY 70 D. C. School Budget. The statement was presented at the hearings of the Subcommittee on District of Columbia Appropriations, House of Representatives. This statement and a list of the names and titles of the people who served on the Advisory Council are to be found in Appendix C. House and Senate hearings have been favorable and school officials are awaiting Congressional action on funding for the next phase.

EXHIBIT I

EDUCATIONAL PARK ADVISORY COUNCIL

Dr. Joseph M. Carroll
Associate Superintendent
Division of Planning, Innovation
and Research
District of Columbia
Public Schools

Dr. Max Wolff
Senior Research Sociologist
Center for Urban Education
New York, New York

Dr. A. Neal Shedd
Coordinator of Urban Education
and Community Service Programs
U. S. Office of Education
Washington, D. C. 20202
Liaison with U. S. Office of Education

Dr. John Sessions
Education Consultant, AFL-CIO
Member, Board of Education
D. C. Public Schools

Dr. Gabriel D. Ofiesh
Program Director, Center for
Educational Technology
Catholic University of America

Mr. Bertram Berenson
Architecture and Special Education
Projects
Council for Exceptional Children
Washington, D. C.

Mr. Otello Meucci
Deputy Director, Educational
Resources Center
D. C. Public Schools

Mr. Granville Woodson
Assistant Superintendent
In Charge of Buildings and
Grounds
District of Columbia
Public Schools

Miss Lorraine M. Wright
Research and Planning Associate
Education Park Project
Division of Planning, Innovation
and Research
D. C. Public Schools

Mr. Roger J. Fish
Research and Planning Associate
Education Park Project
Division of Planning, Innovation
and Research
D. C. Public Schools

EXHIBIT II

FOLLOW-UP STUDY OF 1967 GRADUATES BY HIGH SCHOOL (1968)

High School	No. of 1967 Graduates	Continued Education 1/		In Military		Employment 2/	
		No.	%	No.	%	No.	%
ANACOSTIA	338	143	43.2	16	4.8	153	46.2
BALLOU	287	82	33.7	24	10.3	115	49.2
CARDOZO	371	117	32.3	27	7.4	174	47.9
COOLIDGE	464	318	69.3	14	3.0	122	26.6
DUNBAR	358	91	28.8	30	9.5	137	43.3
EASTERN	549	226	45.0	55	11.0	189	37.6
MCKINLEY	488	292	59.8	35	7.2	139	28.5
ROOSEVELT	391	190	48.6	33	8.4	136	34.8
SPINGARN	295	113	39.1	9	3.2	161	55.7
WESTERN	330	225	68.2	11	3.3	83	25.1
WILSON	410	358	87.3	9	2.2	41	10.0
TOTAL	4,281	2,152		263		1,313	

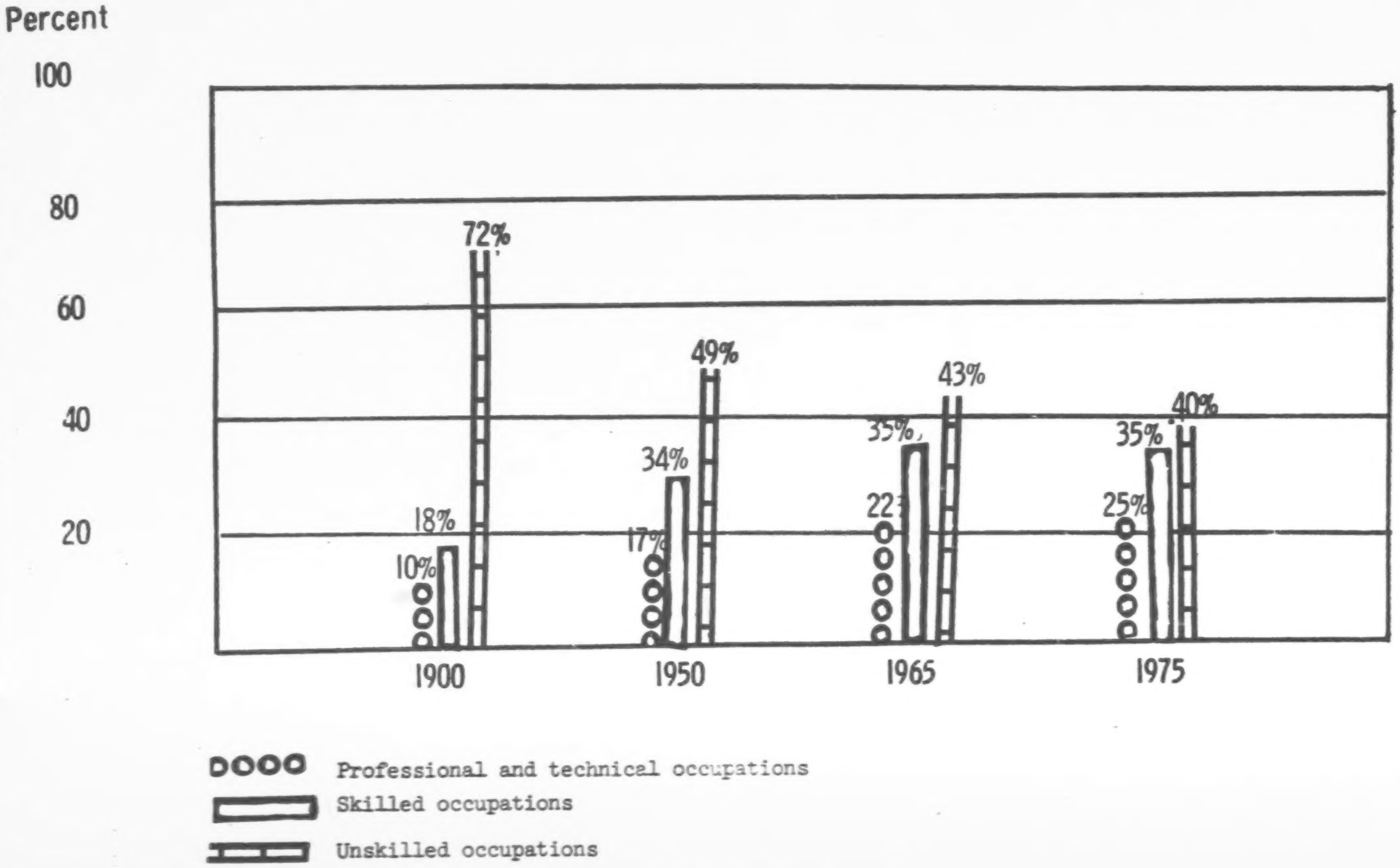
1/ Includes those going to four year, two year and non-degree granting schools.

2/ Includes all employment, full as well as part-time.

Prepared by
Division of Planning, Innovation and Research
D. C. Public Schools

EXHIBIT III

TRENDS IN OCCUPATIONAL DISTRIBUTION, 1900 TO 1975

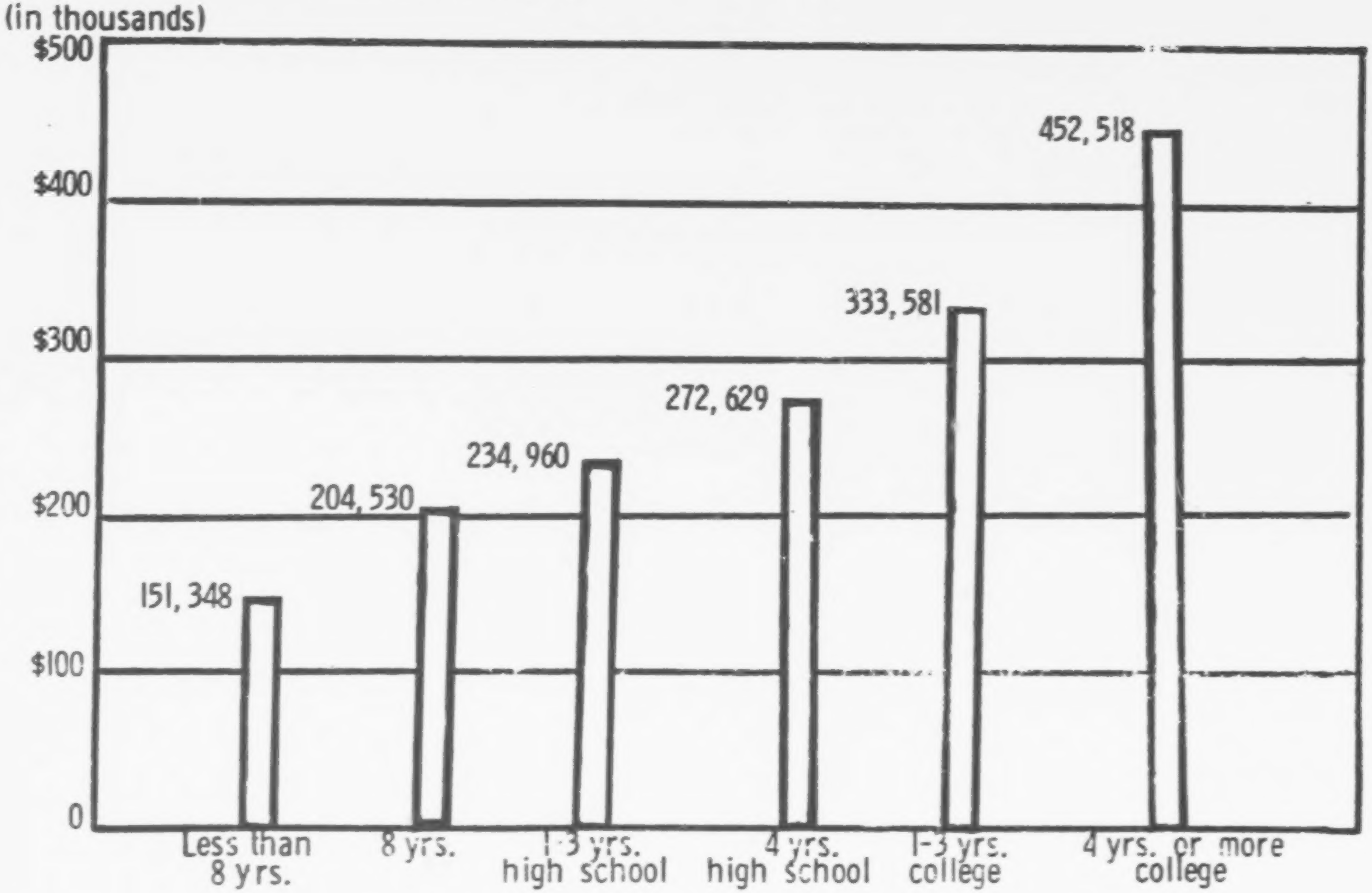


Source: Department of Labor

EXHIBIT IV

ESTIMATED INCOME BY EDUCATIONAL ATTAINMENT ASSUMING A LIFETIME CAREER OF 40 YEARS

(Incomes Based on Current Dollar Values)



SOURCE: Digest of Educational Statistics, 1965 edition, Bulletin 1965, No. 4 , Washington D.C. p. 132.

EXHIBIT V

AN ESTIMATE OF PROBABLE LOST EARNINGS BY THE 1961 SEVENTH GRADE CLASS DUE TO AN EDUCATIONAL ATTAINMENT BELOW THAT NECESSARY TO COMPETE EQUALLY IN THE 1975 JOB MARKET

Estimated Job Achievement	Estimated Potential Lifetime Earnings of the 1961 D. C. Schools Seventh Grade Assuming Students Are Prepared for the 1975 Job Market				Estimated Total Earnings* (adjusted to 57% of total to reflect the portion of the Adult Population actually employed)[2]
	Percent	Number 8441=100%	Earnings Per Person[1]	Total	
UNSKILLED and SEMISKILLED	Dropouts (1-3 yrs. high school) = 20) = 40	1688	$234,960	$396,612,480	
	High school graduates not continuing education = 20)	1688	272,629	460,197,752	
SKILLED	Completing vocational school = 35	2955	333,581	985,731,855	
PROFESSIONAL and TECHNICAL	2-yr. and 4-yr. college graduate = 25	2110	452,518	954,812,980	$1,594,500,000
Estimated Job Achievement	Estimated Actual Earnings of the 1961 D. C. Schools Seventh Grade Based on Apparent Educational Attainment				
	Percent	Number 8441=100%	Earnings Per Person	Total	
UNSKILLED and SEMISKILLED	Dropouts (1-3 yrs. high school) = 39) = 69	3291	234,960	773,253,360	
	High school graduates not continuing education = 30)	2534	272,629	690,841,886	
SKILLED	Completing vocational school = 13	1068[3]	333,581	356,264,508	
PROFESSIONAL and TECHNICAL	2-yrs. and 4-yrs. college graduate = 18	1548[3]	452,518	700,497,864	$1,436,900,000
	ESTIMATED TOTAL LOST INCOME DUE TO UNDER EDUCATION				$157,600,000

[1] U.S. Dept. of Health, Education, and Welfare, Office of Education. Digest of Educational Statistics. 1965 edition. Bulletin 1965, No. 4. Washington, D.C.: Government Printing Office, 1965. p. 132.

[2] U.S. Dept. of Labor, Bureau of Labor Statistics. Special Labor Force Report No. 65, March, 1965, p. A-7.

[3] Based on a follow-up study of the 1961 7th grade class through the first year of post secondary education and on a national survey which indicated that 70% of the first year college students enter the second year.

* It should be observed that these are general estimates of retention and earnings. The purpose of this information is to show an order of magnitude rather than a precise amount.

EXHIBIT VI

SUMMARY: REQUIRED AGE FOR ADMISSION TO FIRST GRADE[1]

Cutoff date	Required age, Sept 1	Number and percent of systems responding by enrollment				
		100,000 or more	50,000-99,999	25,000-49,999	12,000-24,999	Totals
Sept. 1	6 yrs	1 (4.2%)	4 (7.4%)	5 (5.8%)	26 (8.3%)	36 (7.5%)
Sept. 10 or 15	5 yrs, 11½ months	...	2 (3.7%)	5 (5.8%)	16 (5.1%)	23 (4.8%)
Sept. 30 or Oct. 1	5 yrs, 11 months	5 (20.8%)	9 (16.6%)	20 (23.2%)	39 (12.4%)	73 (15.2%)
Oct. 15 or 16	5 yrs, 10½ months	...	2 (3.7%)	3 (3.5%)	21 (6.7%)	26 (5.4%)
Oct. 31 or Nov. 1	5 yrs, 10 months	1 (4.2%)	8 (14.8%)	4 (4.6%)	43 (13.6%)	56 (11.7%)
Nov. 15	5 yrs, 9½ months	...	1 (1.9%)	1 (1.2%)	3 (0.9%)	5 (1.0%)
Nov. 30 or Dec. 1	5 yrs, 9 months	5 (20.8%)	9 (16.6%)	25 (29.1%)	83 (26.3%)	122 (25.5%)
Dec. 31 or Jan. 1	5 yrs, 8 months	11 (45.8%)	17 (31.5%)	18 (20.9%)	55 (17.5%)	101 (21.1%)
Jan. 31 or Feb. 1	5 yrs, 7 months	1 (4.2%)	1 (1.9%)	...	16 (5.1%)	18 (3.8%)
Feb. 10	5 yrs, 6½ months	...	...	1 (1.2%)	...	1 (0.2%)
Feb. 28 or Mar. 1	5 yrs, 6 months	...	...	1 (1.2%)	...	1 (0.2%)
Kdgn.	required	...	1 (1.9%)	3 (3.5%)	12 (3.8%)	16 (3.4%)
No minimum		...	...	...	1 (0.3%)	1 (0.2%)
Total number of district responding		24 (100.0%)	54 (100.0%)	86 (100.0%)	315 (100.0%)	479 (100.0

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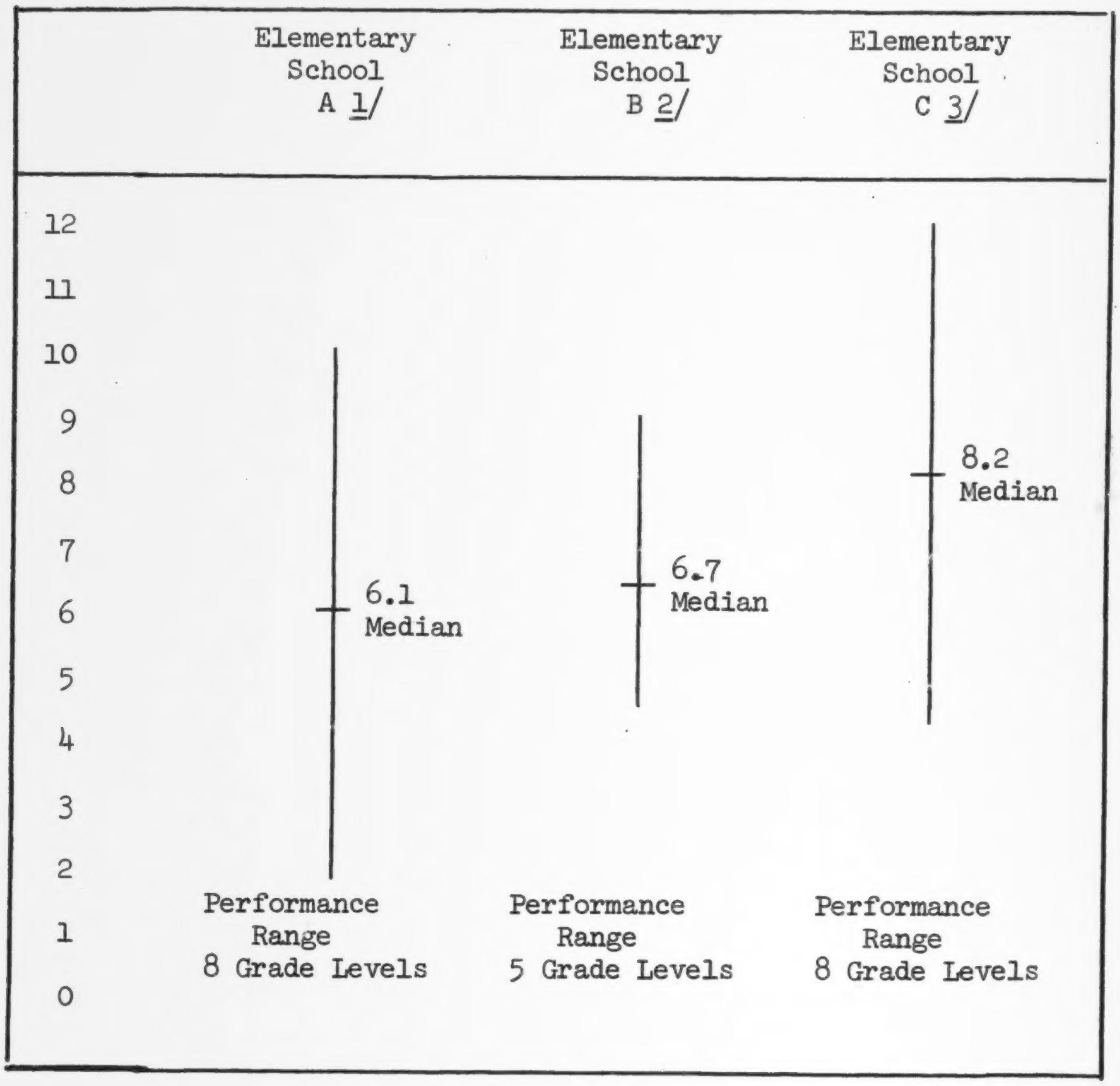
[1] Source: "Entrance Age Policies", ERS Circular, Research Division, National Education Association, Washington, D. C., Nov. 5, 1968.

EXHIBIT VII

RANGE OF GRADE LEVELS ON STANDARDIZED READING ACHIEVEMENT TESTS IN THREE SIX GRADES IN THREE DISTRICT OF COLUMBIA PUBLIC SCHOOLS.



1/ Median income of families $ 3,338

2/ Median income of families $ 5,726

3/ Median income of families $ 12,600

Prepared by
Division of Planning, Innovation and Research
D. C. Public Schools

EXHIBIT VIII

A PARTIAL SOCIOECONOMIC PROFILE OF WASHINGTON, D. C.1/

	In Central City	Outside Central City
Number of families	173,695	305,212
Percent in Poverty Area	42.8	3.8
Percent below poverty level	16.7	6.0

	White Families	Nonwhite Families
Number	373,409	105,498
Percent in Central City	22.1	86.3
Percent in Poverty Area	5.7	61.3
Percent below Poverty Level	5.3	26.0
Percent of nonwhite occupied rental housing substandard	21	
Children in families below poverty level (Central City and outside Area)		
Under 6 years	51,719	
6 to 17 years	63,974	

1/ Dr. Margot Louria, Profiles of Twenty Major American Cities. Office of Programs for the Disadvantaged, U. S. Office of Education, Department of Health, Education and Welfare, January, 1968. The information shown above is based on 1960 census data and therefore has limited value in 1968. However, it is indicative of the kind of information needed for national planning.

EXHIBIT IX

PROFESSIONALS CONSULTED IN CONJUNCTION WITH THE DEVELOPMENT OF EDUCATIONAL PROGRAM FACTORS

Miss Evelyn Bull
Elementary School Director
of Supervision and Instruction
D. C. Public Schools

Dr. Dorothy Johnson
Assistant Superintendent
for Elementary Schools
D. C. Public Schools

Mr. Frank Bolden
Supervisor Health, Physical
Education and Safety
D. C. Public Schools

Mrs. Marie Williams
Supervisor Art
D. C. Public Schools

Mrs. Lucille Polk
Supervisor Business Education
and Distributive Education
D. C. Public Schools

Mrs. Charlotte Brooks
Supervisor English
D. C. Public Schools

Dr. Judith Le Bovett
Supervisor Foreign Languages
D. C. Public Schools

Mr. Joseph Penn
Supervisor History
D. C. Public Schools

Mrs. Erna Chapman
Supervisor Home Economic
D. C. Public Schools

Mrs. Emma Lewis
Supervisor Mathematics
D. C. Public Schools

Mr. Paul Gable
Supervisor Music
D. C. Public Schools

Mrs. Katherine Lumley
Supervising Director
Reading Clinic
D. C. Public Schools

Mrs. Louise Keets
Supervising Director
PACE Project SCOPE

Mr. Thomas McManus
Director, Educational Resource
Center
D. C. Public Schools

Dr. James Aven
Director, Washington Integrated
Secondary School Program

Dr. William Chase
U. S. Office of Education

Dr. Milton Akers
National Association for the
Education of Young Children

Mr. Paul Cawein
Educational Interns, U. S.
Office Of Education

Miss Sharlene Pearlman
Educational Interns, U. S.
Office of Education

EXHIBIT X

NUMBER OF ENROLLEES BY AVAILABLE STUDENT GROUPS.

Course or Program	Percent Enroll-ing	1000	2000	3000	4000	5000	6000	7000	8000	9000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
	.1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	.2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
Severely Ment. Retarded	.3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60
	.4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68	72	76	80
	.5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
	.6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	.7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119	126	133	140
	.8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136	144	152	160
	.9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	162	171	180
	1	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
Educable MR	2	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	360	380	400
Gifted Students 130 IQ & above	3 1/	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510	540	570	600
	4	40	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680	720	760	800
	5	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000
	6	60	120	180	240	300	360	420	480	540	600	660	720	780	840	900	960	1,020	1,080	1,140	1,200

EXHIBIT X (con't)

Course or Program	Percent Enroll-ing	1000	2000	3000	4000	5000	6000	7000	8000	9000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000
	7	70	140	210	280	350	420	490	560	630	700	770	840	910	980	1,050	1,120	1,190	1,260	1,330	1,400
	8	80	160	240	320	400	480	560	640	720	800	880	960	1,040	1,120	1,200	1,280	1,360	1,440	1,520	1,600
	9	90	180	270	360	450	540	630	720	810	900	990	1,080	1,170	1,260	1,350	1,440	1,530	1,620	1,710	1,800
	10	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000

1/ 3% represents the estimated number of student with I.Q. of 130 or above for whom intensive specialized course offerings and facilities, e.g., planetarium, printcraft lab, etc., should reasonably be provided.

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EXHIBIT XI

FACILITY UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF STUDENTS FOR INSTRUCTIONAL PURPOSES

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
% of Student Group Utilizing Facility	Proportion of Student Time Allocated to Use 1/	Group Size	Per Student Utilization Factor $\frac{c.1 \times c.2}{c.3}$	Estimated Number of Students Needed for Full Utilization of Facility 2/ $\frac{1.3}{c.4}$
.10	0.167	20	.00000835	155,689
.20	0.167	20	.00001670	77,844
.30	0.167	20	.00002505	51,896
.40	0.167	20	.00003340	38,922
.50	0.167	20	.00004175	31,138
.60	0.167	20	.00005010	25,948
.70	0.167	20	.00005845	22,241
.80	0.167	20	.00006680	19,461
.90	0.167	20	.00007515	17,299
1.00	0.167	20	.0000835	15,569
2.00	0.167	20	.000167	7,784
3.00	0.167	20	.000251	5,189
4.00	0.167	20	.000334	3,892
5.00	0.167	20	.000418	3,113
6.00	0.167	20	.000501	2,594
7.00	0.167	20	.000585	2,224
8.00	0.167	20	.000668	1,946
9.00	0.167	20	.000752	1,729
10.00	0.167	20	.000835	1,556
11.00	0.167	20	.000919	1,415
12.00	0.167	20	.001002	1,297
13.00	0.167	20	.001085	1,197
14.00	0.167	20	.001169	1,112
15.00	0.167	20	.001252	1,037
16.00	0.167	20	.001336	973
17.00	0.167	20	.001419	916
18.00	0.167	20	.00150	866
19.00	0.167	20	.00158	822
20.00	0.167	20	.00167	778

1/ Student time allocation is based on the following: 30 periods per week = 100% pupil time; 6 1/2 hours per day x 185 days = 1203 hours per year. The average high school student spends 5 periods per week in each subject area; 5 periods = .167 of student time per week. (5 ÷ 30 = .167

2/ Facility utilization is based on the following: facilities available 35 periods per week; assuming 95% space utilization, this provides 33 periods per week; 33 periods per week = 30 periods per pupil (100% pupil time) = 1.3 full time pupil load is accommodated in a single space or, in other words, a single space (classroom; carrel; special lab) is available .3 more a week than the student is available to use it. (33 ÷ 30 = 1.3)

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EXHIBIT XII

STAFF UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF STUDENTS FOR INSTRUCTIONAL PURPOSES

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
% of Student Group Utilizing Specialist Staff	Proportion of Student Time Allocated to Use[1]	Group Size	Per Student Utilization Factor $\frac{c.1 \times c.2}{c.3}$	Estimated Number of Students Needed for Full Staff Utilization[2] $\frac{.83}{c.4}$
.10	0.167	20	.00000835	99,401
.20	0.167	20	.00001670	49,700
.30	0.167	20	.00002505	33,133
.40	0.167	20	.00003340	24,850
.50	0.167	20	.00004175	19,880
.60	0.167	20	.00005010	16,566
.70	0.167	20	.00005845	14,200
.80	0.167	20	.00006680	12,425
.90	0.167	20	.00007515	11,044
1.00	0.167	20	.0000835	9,401
2.00	0.167	20	.000167	4,970
3.00	0.167	20	.000251	3,306
4.00	0.167	20	.000334	2,485
5.00	0.167	20	.000418	1,985
6.00	0.167	20	.000501	1,656
7.00	0.167	20	.000585	1,418
8.00	0.167	20	.000668	1,242
9.00	0.167	20	.000752	1,103
10.00	0.167	20	.000835	904
11.00	0.167	20	.000919	903
12.00	0.167	20	.001002	828
13.00	0.167	20	.001085	764
14.00	0.167	20	.001169	710
15.00	0.167	20	.001252	662
16.00	0.167	20	.001336	621
17.00	0.167	20	.001419	584
18.00	0.167	20	.00150	553
19.00	0.167	20	.00158	525
20.00	0.167	20	.00167	497

[1] Student time allocation is based on the following; 30 periods per week = 100% pupil time; 6½ hours per day x 185 days = 1203 hours per year. The average high school student spends 5 periods per week in each subject area; 5 periods = .167 of student time per week (5 ÷ 30 =.167).

[2] Staff utilization is based on the present union contract of 25 periods per week per teacher. Thus, 25 teaching periods = .83 full time pupil load per teacher (25 ÷ 30=83). Because the number of hours a teacher is permitted to teach is less than the number of hours a student is available, a teacher is able to accommodate only 83% of a student's time.

Prepared by
Division of Planning, Innovation and Research
D. C. Public Schools

EXHIBIT XIII

RESOURCE UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF STUDENTS FOR INSTRUCTIONAL PURPOSES

Type of Resource	Col. 1 Proportion of Student Group Utilizing Resource	Col. 2 Proportion of Student Time Allocated to Resource Use[1]	Col. 3 Group Size for Use of Resource	Col. 4 Per Student Use of Resource Factor $\frac{c.1 \times c.2}{c.3}$	Col. 5 Estimated Number of Students Needed for Full Utilization
					Facility Utilization[2] $\frac{1.3}{c.4}$
A. Special Facility					
Math Lab. Classroom	.10	.167	20	.000835	1556
Planetarium:					
General Courses	.20	.167	25	.000133	9774
Specialized Courses	.01	.167	20	.0000835	15568
TV Workshop	.05	.167	10	.000835	1556
Printcraft Facility	.01	.167	20	.000835	1556
Home Economic Lab.	1.00	.167	20	.08350	15
Wading Pool (Pre-K)	1.00	.167	15	.011133	116
Oceanographic Lab.	.30	.167	15	.003340	389
					Staff Utilization[3] $\frac{.83}{c.4}$
B. Special Staff Competence					
Russian	.05	.167	15	.003340	248
Chinese	.01	.167	15	.001113	745
Middle English (Sr. H.S.)	.03	.167	20	.00025	3320
Sculptor	.02	.167	10	.000334	2485

[1] Student time allocation is based on the following: 30 periods per week = 100% pupil time; 6½ hours per day x 185 days = 1203 hours per year. The average high school student spends 5 periods per week in each subject area: 5 periods =.167 of student time per week (5 ÷ 30 = .167).

[2] Facility utilization is based on the following: Facilities available 35 periods per week; assuming 95% space utilization this provides 33 periods per week; 33 periods per week = 30 periods per pupil (100% pupil time) = 1.3 full time pupil load is accomodated in a single space or, in other words, a single space (classroom, carrel, special lab) is available .3 more a week than the student is available to use it (33 ÷ 30 = 1.3).

[3] Staff utilization is based on the persent union contract of 25 periods per week per teacher. Thus, 25 teaching periods = .83 full time pupil load per teacher (25 ÷ 30 = .83). Because the number of hours a teacher is permitted to teach is less than the number of hours a student is available, a teacher is able to accommodate only 83% of student time.

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D. C. Public Schools

EXHIBIT XIV

GENERAL HEALTH CHARACTERISTICS OF LOW INCOME FAMILIES NATIONWIDE, 1967[1/]

In 1967:

- 50% of poor children were without immunization
- 64% had no dental care
- 45% of the women who gave birth in public hospitals had had no pre-natal care

Poor families have:[2/]

- 3 times more disabling heart disease
- 7 times more visual impairment
- 5 times more mental illness

Among those of the "poor" who work:

- 1/3 have chronic illness that severely limits their job capacity

The top three "Killer" diseases among the poor are:

- Tuberculosis
- Pneumonia
- Influenza

Incidents of mental illness and retardation are:

- twice as frequent among the lower class than among the middle and upper classes
- inadequate counseling for family planning
- low rates of immunization
- poor nutrition

Among Job Corps participants:

- 90% had no record of any previous dental care
- 70% had not seen a physician for 3 or 4 years
- the group averaged 10 lbs overweight
- 1/3 had visual defects that had never before been diagnozed
- an average of 27 visits to the medical center was required the first year.

1/ Joseph T. English, "OEO Health Programs," A Journal of Medical Care Organization, Provision and Financing, Vol. V, Number 1, March, 1968, pp. 43-48.

2/ A "poor" person is considered to be a person with an annual income of $2,000 or less.

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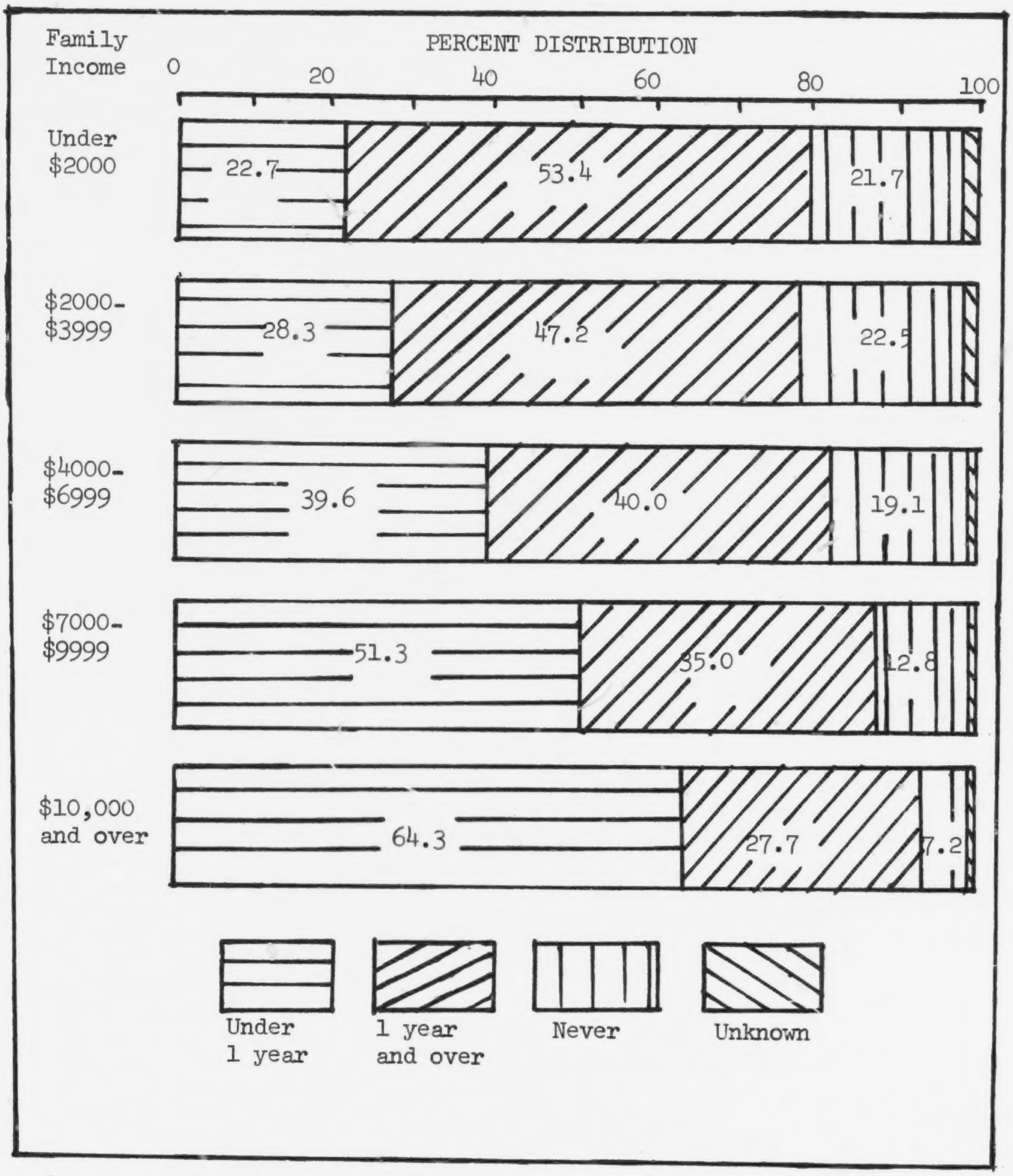
D. C. Public Schools

EXHIBIT XV

PERCENT DISTRIBUTION OF PERSONS, BY TIME INTERVAL SINCE LAST DENTAL VISIT ACCORDING TO FAMILY INCOME. 1/



1/ Dental Visits: Time Interval Since Last Visit, United States, July, 1963-June, 1964. National Center for Health Statistics, Series 10, Number 29. U. S. Department of Health, Education and Welfare. April, 1966. (The Exhibit demonstrates the strong relationship between family income and the time interval since last dental visit. Family income is not the most precise measure of socioeconomic level, but it serves well in depicting the clear relationship between dental care and economic status.)

EXHIBIT XVI

PERCENT DISTRIBUTION OF PERSONS, BY TIME INTERVAL SINCE LAST DENTAL VISIT ACCORDING TO FAMILY INCOME AND AGE: UNITED STATES, JULY 1963-JUNE 1964[1]

Family income and age	All persons	Time interval since last dental visit						
		Under 6 months	6-11 months	1 year	2-4 years	5 years and over	Never	Unknown
		Percent distribution						
All incomes								
All ages--------	100.0	28.7	13.3	12.6	13.3	14.0	16.6	1.4
Under 5 years---------	100.0	8.1	3.0	1.5	0.3	...	86.9	*
5-14 years-----------	100.0	38.0	16.9	12.1	7.0	1.1	24.5	0.4
15-24 years-----------	100.0	36.5	18.7	17.1	14.4	4.5	7.1	1.8
25-44 years-----------	100.0	32.6	15.9	16.9	18.8	12.2	2.0	1.6
45-64 years-----------	100.0	26.9	11.5	13.1	18.5	26.9	1.3	1.8
65 years and over-----	100.0	14.4	6.4	7.7	15.2	51.7	1.5	3.1
Under $2,000								
All ages--------	100.0	14.9	7.8	9.7	15.0	28.7	21.7	2.1
Under 5 years---------	100.0	*	*	*	*	...	95.3	*
5-14 years-----------	100.0	12.9	8.3	9.2	8.5	1.9	58.3	*
15-24 years-----------	100.0	32.9	16.1	14.9	13.8	4.9	15.7	1.7
25-44 years-----------	100.0	18.0	9.9	14.7	23.3	21.9	9.3	3.0
45-64 years-----------	100.0	13.6	7.1	11.0	20.9	42.0	3.3	2.2
65 years and over-----	100.0	9.1	4.1	6.4	15.6	59.6	2.1	3.2
$2,000-$3,999								
All ages--------	100.0	18.2	10.2	11.9	15.8	19.5	22.5	1.9
Under 5 years---------	100.0	3.5	1.7	*	*	...	93.3	*
5-14 years-----------	100.0	22.6	12.2	12.0	8.7	1.3	42.3	*
15-24 years-----------	100.0	26.4	15.8	17.9	18.9	6.7	11.5	2.7
25-44 years-----------	100.0	21.1	12.6	17.5	24.4	17.4	4.2	2.7
45-64 years-----------	100.0	17.1	9.5	11.6	21.5	36.1	2.0	2.2
65 years and over-----	100.0	13.9	6.3	7.7	15.9	52.7	1.3	2.3

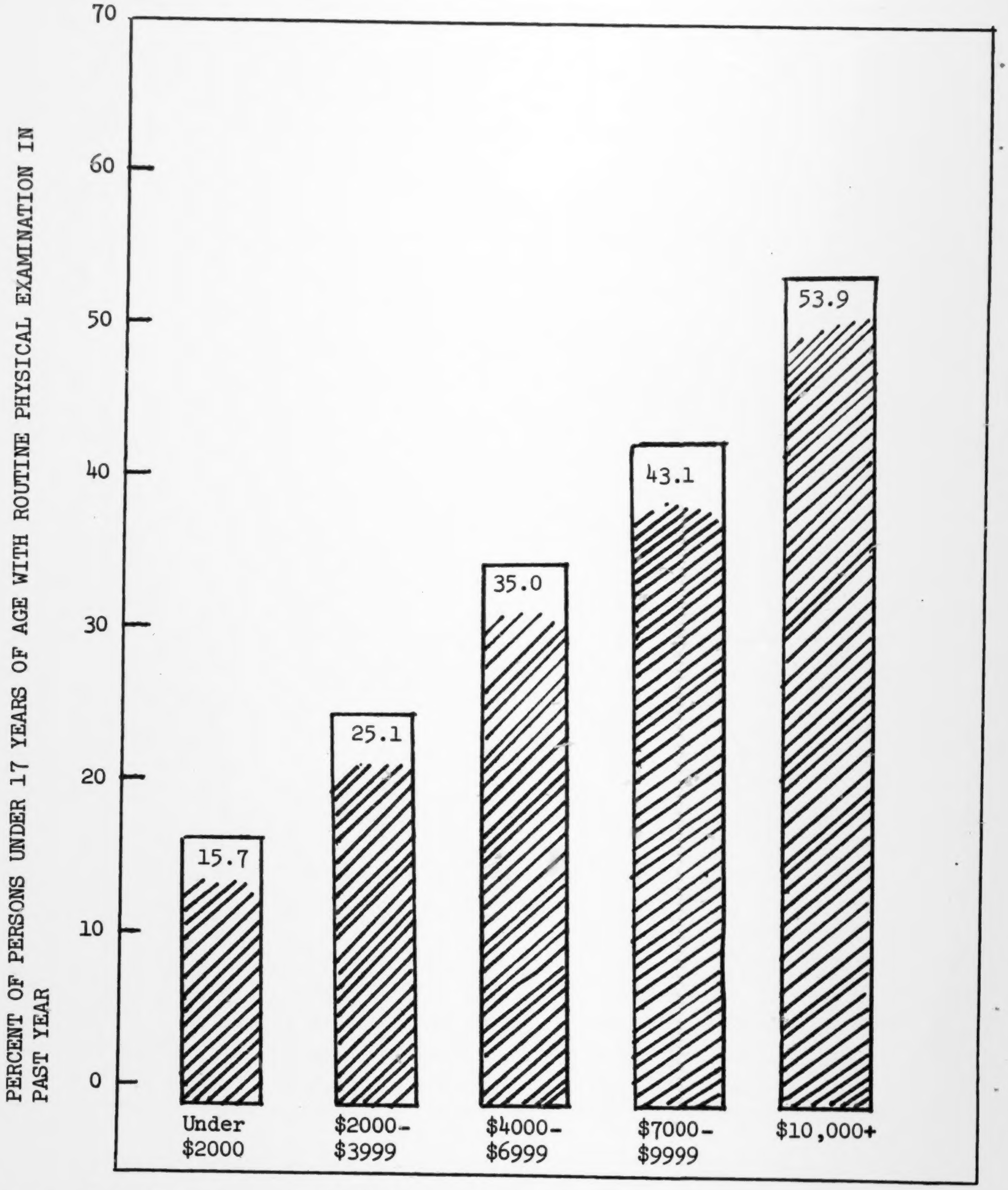
EXHIBIT XVI (continued)

Family income and age	All persons	Time interval since last dental visit						
		Under 6 months	6-11 months	1 year	2-4 years	5 years and over	Never	Unknown
$4,000-$6,999	Number of persons in thousands							
All ages--------	58,956	15,517	7,956	8,085	8,365	7,157	11,276	599
Under 5 years---------	8,061	528	210	131	*	...	7,155	*
5-14 years------------	13,214	4,535	2,358	1,822	1,062	175	3,223	*
15-24 years-----------	8,256	2,826	1,557	1,525	1,322	426	497	103
25-44 years-----------	15,968	4,670	2,431	2,890	3,353	2,154	269	212
45-64 years-----------	10,526	2,450	1,174	1,461	2,169	3,017	100	155
65 years and over-----	2,930	508	225	257	430	1,395	*	83
$7,000-$9,999								
All ages--------	36,476	12,744	5,954	4,948	4,465	3,371	4,684	310
Under 5 years---------	4,040	520	710	81	*	...	3,252	*
5-14 years------------	8,504	3,880	1,733	1,029	556	79	1,209	*
15-24 years-----------	4,907	1,958	1,038	877	678	145	129	81
25-44 years-----------	10,863	4,002	1,958	1,863	1,818	1,074	52	97
45-64 years-----------	6,899	2,132	953	981	1,190	1,535	*	71
65 years and over-----	1,262	251	102	116	209	538	*	*
$10,000 and over								
All ages--------	28,825	13,744	4,799	3,536	2,513	1,932	2,077	224
Under 5 years---------	2,196	420	125	*	*	...	1,594	*
5-14 years------------	6,222	3,797	1,174	638	210	*	370	*
15-24 years-----------	4,039	2,159	832	586	287	70	60	*
25-44 years-----------	7,865	3,757	1,485	1,179	912	446	*	59
45-64 years-----------	7,301	3,252	1,041	969	961	992	*	67
65 years and over-----	1,202	359	143	119	133	400	*	*

1/ Dental Visits: Time Interval Since Last Visit, United States, July, 1963-June, 1964. National Center for Health Statistics, Series 10, Number 29. U. S. Department of Health, Education and Welfare. April, 1966. This Exhibit is a further expansion of Exhibit XV showing the lack of dental health care by income group and age bracket.

EXHIBIT XVII

PERCENT OF PERSONS UNDER 17 YEARS OF AGE WITH ROUTINE PHYSICAL EXAMINATION IN PAST YEAR. [1]



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[1] Physician Visits: Interval of Visits and Children's Routine Checkup United States, July, 1963-June, 1964. National Center for Health Statistics, Series 10, Number 19. U. S. Department of Health, Education and Welfare. June, 1965.

EXHIBIT XVIII

NUMBER OF PERSONS IN WASHINGTON, D. C., ESTIMATED TO HAVE SELECTED CHRONIC DISEASES WITH INCOMES OF $2,000 OR LESS. 1/

Selected Chronic Illness	Percent of Population 2/	Number of Cases Estimated 3/
Heart Condition	53.8	38,836
Mental and Nervous Conditions	26.4	19,007
Arthristis and Rheumatism	59.3	42,686
High Blood Pressure	23.8	17,136
Orthopedic Impairment	54.4	39,168
Visual Impairment	23.4	16,848

1/ Income level based on 1966 Internal Revenue figures for reported annual income. D. C. showed a total of 71,999 citizens who reported annual income as below $2,000. This figure does not include those who made no report of income earned.

2/ Source: Elijah H. White, "Age and Income Differentials," A Journal of Medical Care Organization, Provision and Financing, Vol. V, Number 1, March, 1968, pp. 18-30. Percentages were based on incidents in Fiscal Year 1963.

3/ This figure was derived by taking the percent from "Age and Income Differentials" and applying it to the figures from the Internal Revenue Department. Thus the figure shown in column three is considerably lower than might actually be the number.

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EXHIBIT XIX

HEALTH AND WELFARE PROFILE OF WASHINGTON, D. C.[1/]

Characteristic	Dist. of Col.	US Average	High State		Low State	
(1) Health Manpower Rate Per 100,000 Population:						
1963 - Physicians	357	140	D.C.	357	Alaska	69
Dentist	93	53	D.C.	93	S.C.	23
Nurses	507	286	D.C.	507	Ark.	119
1965 - Dentist	-	56	N.Y.	79	S.C.	23
Physicians	-	153	N.Y.	217	Alaska	71
(2) 1965						
Percent of Civilian Population Covered by Hospital Insurance	-	80.9%	N.Y.	95.6%	Alaska	49.1%
(3) 1962						
Hospital Use Per 1,000 Population Ending September 30						
General & Special - Admissions	266.2	139.0	D.C.	266.2	P.R.	78.4
- Days	3,198.0	1,286.7	D.C.	3,198.0	P.R.	666.3
Mental - Admissions	2.6	2.5	Wyom.	4.3	P.R.	.5
- Days	3,163.3	1,380.8	D.C.	3,163.3	P.R.	73.9
Tuberculosis - Admission	-	.4	Alaska	4.9	Iowa	less than .05
- Days	-	71.8	Alaska	233.8	Utah	15.6
Selected Maternity Services						
Medical Clinic Services						
Number of Mothers	4,099	279,629	P.R.	59,456	Minn.	34
Rate Per 1,000 Live Births	204	66	V.Isl.	786	Ill.	2
Nursing Service (Mothers)	-	578,429	N.Y.	50,171	Conn.	144
Selected Child Health Services						
Well Child Conference Services						
Infants	13,209	613,848	N.Y.	101,280	N.H.	74
Other Children	26,951	918,996	N.Y.	175,768	N.H.	123
Nursing Service (Infants & Other Children)	-	2,994,443	S.C.	441,300	N.H.	735

SOURCE:

1/ Dr. David Iwamoto, Selected Information for State Comprehensive Planning, U. S. Office of Education (mimeographed). 1968

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EXHIBIT XX

STAFF UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF POPULATION FOR COMMUNITY PURPOSES

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
% of Community Utilizing Specialist Staff	Proportion of Community Time Allocated to Use 1/	Group Size or Case Load	Per Person Utilization Factor $\frac{c.1 \times c.2}{c.3}$	Est. Number of People Needed for Full Community Utilization of Resource2/ $\frac{.51}{c.4}$
.10	.083	10	.0000083	61,445
.20	.083	10	.0000166	30,722
.30	.083	10	.0000249	20,481
.40	.083	10	.0000332	15,361
.50	.083	10	.0000415	12,289
.60	.083	10	.0000498	10,240
.70	.083	10	.0000581	8,777
.80	.083	10	.0000664	7,680
.90	.083	10	.0000747	6,827
1.00	.083	10	.000083	6,144
2.00	.083	10	.000166	3,072
3.00	.083	10	.000249	2,048
4.00	.083	10	.000332	1,536
5.00	.083	10	.000415	1,228
6.00	.083	10	.000498	1,024
7.00	.083	10	.000581	877
8.00	.083	10	.000664	768
9.00	.083	10	.000747	682
10.00	.083	10	.000830	614
11.00	.083	10	.000913	558
12.00	.083	10	.000996	512
13.00	.083	10	.001079	472
14.00	.083	10	.001162	438
15.00	.083	10	.001245	409
16.00	.083	10	.001328	384
17.00	.083	10	.001411	361
18.00	.083	10	.001494	341
19.00	.083	10	.001577	323
20.00	.083	10	.001660	307

1/ Community time allocation is based on the following assumptions: 12 hrs./day x 7 days/wk. = 84 hrs./wk. or 4,380 hrs./yr. allocated for community use. Assuming 1 hr. = 1 period, 84 periods/wk. = 100% availability of service or resource. The proportion of time allocated to community use would be .083 parts of the operational week (7 days/wk. ÷ 84 = .083).

2/ Staff utilization is based on the following assumptions: The facility is available 79 periods (hours) per week; but a staff member works a 40 hour week, therefore, each staff member is available 51% (40 ÷ 79 = .51) of the time the facility is available.

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EXHIBIT XXI

FACILITY UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF POPULATION FOR COMMUNITY PURPOSES

Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
% of Community Utilizing Facility	Proportion of Community Time Allocated to Use 1/	Group Size or Case Load	Per Person Utilization Factor $\frac{c.1 \times c.2}{c.3}$	Est. Number of People Needed for Full Community Utilization of Facility2/ $\frac{1.06}{c.4}$
.10	.083	10	.0000083	127,710
.20	.083	10	.0000166	63,855
.30	.083	10	.0000249	42,570
.40	.083	10	.0000332	31,927
.50	.083	10	.0000415	25,542
.60	.083	10	.0000498	21,285
.70	.083	10	.0000581	18,244
.80	.083	10	.0000664	15,963
.90	.083	10	.0000747	14,190
1.00	.083	10	.000083	12,771
2.00	.083	10	.000166	6,385
3.00	.083	10	.000249	4,257
4.00	.083	10	.000332	3,192
5.00	.083	10	.000415	2,554
6.00	.083	10	.000498	2,128
7.00	.083	10	.000581	1,824
8.00	.083	10	.000664	1,596
9.00	.083	10	.000747	1,419
10.00	.083	10	.000830	1,277
11.00	.083	10	.000913	1,161
12.00	.083	10	.000996	1,064
13.00	.083	10	.001089	973
14.00	.083	10	.001162	912
15.00	.083	10	.001245	851
16.00	.083	10	.001328	798
17.00	.083	10	.001411	751
18.00	.083	10	.001494	709
19.00	.083	10	.001577	672
20.00	.083	10	.001660	638

1/ Community time allocation is based on the following assumptions: 12 hrs./day x 7 days/wk. = 84 hrs./wk. or 4,380 hr./yr. allocated for community use. Assuming 1 hr. = 1 period, 84 per./wk. = 100% availability of service or resource. The proportion of time allocated to community use would be .083 parts of the operational week (7 days/wk. ÷ 84 = .083).

2/ Facility utilization is based on the following assumptions: Community facilities would be available 84 per./wk.; assuming 95% space utilization, 79 periods/person/wk. = 100% (maximum) participant time. The facility utilization factor, then, is 1.06 (84 ÷ 79 = 1.06) or the facility is available .06 more a week than a person is available to use it.

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EXHIBIT XXII

RESOURCE UTILIZATION FACTORS INFLUENCING LEVEL OF CONCENTRATION OF COMMUNITY FOR INSTRUCTIONAL PURPOSES

Type of Resource	Col. 1 Proportion of Community Group Utilizing Resource	Col. 2 Proportion of Participant Time Allocated to Resource Use[1/]	Col. 3 Group Size for Use of Resource	Col. 4 Per Participant Use of Resource Factor $\frac{c.1 \times c.2}{c.3}$	Col. 5 Estimated Number Needed for Full Utilization
A. **Special Facility**					Facility Utilization[2/] $\frac{1.06}{c.4}$
Comprehensive Family Health Clinic	.40	.083	20	.01660	63
TV Workshop	.05	.083	8	.000518	2046
Printcraft Facility	.15	.083	10	.001245	851
Legal Aid Center	.02	.083	3	.000553	1916
Day Care Center	.25	.083	25	.000830	1277
B. **Special Staff Competence**					Staff Utilization[3/] $\frac{.51}{c.4}$
M.D. General Practitioner	.70	.083	2	.02905	17
TV Electrician	.05	.083	8	.000518	948
Printer	.15	.083	10	.001245	409
Lawyer	.02	.083	3	.000553	922

[1/] Community time allocation is based on the following assumptions: 12 hrs./day x 7 days/wk. = 84 hrs./wk. or 4,380 hrs./yr. allocated for community use. Assuming 1 hr. = 1 period, 84 per/wk. = 100% availability of service or resource. The proportion of time allocated to community use would be .083 parts of the operational week (7 days/wk. ÷ 84 = .083)

[2/] Facility utilization is based on the following assumptions: Community facilities would be available 84 per./wk.; assuming 95% space utilization, 79 periods/person/wk. = 100% (maximum) participant time. The facility utilization factor, then, is 1.06 (84 ÷ 79 = 1.06) or the facility is available .06 more a week than a person is available to use it.

[3/] Staff utilization is based on the following assumptions: The facility is available 79 periods (hours) per week; but a staff member works a 40 hour week, therefore, each staff member is available 51% (40 ÷ 79 = .51) of the time the facility is available.

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EXHIBIT XXIII

AGENCIES AND PROFESSIONALS CONSULTED IN CONJUNCTION WITH THE DEVELOPMENT OF COMMUNITY PROGRAM FACTORS

District of Columbia Public Health Department

Ralph Conn
Public Health Information Service

Mr. Frazier
Public Health Program Planning

Dr. Murray Grant
District of Columbia Health Director

Dr. I. Blanche Bourne
Coordinator, School Health Program
D. C. Department of Public Health

Bureau of Indian Health

Dr. Rabeau
Mr. Joseph Watson
Mr. Nishimoto

National Center for Health Statistics U. S. Department of Health, Education and Welfare

Miss Surber

Armed Forces

Dr. Benjamin Baker, M. D.
Chief, Plans and Management Division, USAF

Lt. Col. James Holland
Medical Administration Staff Officer
Plans and Management Division, USAF

Maj. James Pence
Medical Administration Staff Officer
Plans and Management Division, USAF

Lt. Col. C. L. Poe
Support Manpower Requirements Branch
Directorate of Manpower and Organization, USAF

National Health Agencies

Community Health Center

National Institutes of Health

National Health Association

EXHIBIT XXIV

DATE OF ERECTION OF PUBLIC SCHOOL BUILDINGS 1/ BY TEN YEAR PERIODS 2/, D. C. PUBLIC SCHOOLS

<table>
<tr><th>LEVEL OF SCHOOL</th><th>1860-69</th><th>1870-79</th><th>1880-89</th><th>1890-99</th><th>1900-09</th><th>1910-19</th><th>1920-29</th><th>1930-39</th><th>1940-49</th><th>1950-59</th><th>1960-69</th></tr>
<tr><td>SENIOR HIGH SCHOOLS</td><td></td><td></td><td></td><td>1</td><td></td><td>2</td><td>2</td><td>3</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td>VOCATIONAL HIGH SCH.</td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td>3</td><td></td><td></td><td></td></tr>
<tr><td>JUNIOR HIGH SCHOOLS</td><td></td><td></td><td></td><td></td><td>2</td><td>1</td><td>6</td><td>5</td><td>3</td><td>5</td><td>7</td></tr>
<tr><td>ELEMENTARY SCHOOLS</td><td>1</td><td>2</td><td>13</td><td>17</td><td>18</td><td>10</td><td>18</td><td>15</td><td>17</td><td>15</td><td>16</td></tr>
<tr><td>70 years or older</td><td colspan="4">18%</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>50 years or older</td><td colspan="6">37%</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>30 years or older</td><td colspan="8">65%</td><td></td><td></td><td></td></tr>
</table>

1/ Dates of Additions not included.

2/ Capacity of Each Public School Building - Erection Dates of Buildings and Additions - Number cf and Use of Rooms 1966-67. Office of the Statistical Analyst, February, 1967.

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EXHIBIT XXV

OVERCROWDING, BUILDING CAPACITY AND ACTUAL MEMBERSHIP BY LEVEL

LEVEL	BUILDING CAPACITY [1]	ACTUAL MEMBER - SHIP, 1967-68 (end of first six weeks)[2]	AMOUNT OVERCROWDED
Senior High Schools (grades 10-12)	17,154	19,211	2,057
Junior High Schools (grades 7-9)	27,671	31,256	3,585
Elementary Schools (grades K-6)	86,718	95,353	8,635
TOTALS	131,543	145,820	14,277

1/ Source: Capacity of Each Public School Building--Erection Dates of Buildings and Additions--Number of and Use Made of Rooms. Office of the Statistical Analyst, D. C. Public Schools, February, 1967 (Capacities shown above were determined in October, 1966).

2/ Source: Revised City-Wide Projections of Pupil Population in the Regular Day Schools, By Grades and Types of School, For the End of the First Six Weeks in Each School Year. Department of General Research, Budget and Legislation, D. C. Public Schools, March, 1968. (Actual Membership for 1967-68 are those of October 19, 1967).

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EXHIBIT XXVI

ENROLLMENT CAPACITY, ACTUAL MEMBERSHIP AND PROJECTED ENROLLMENTS BY LEVEL, D.C. PUBLIC SCHOOLS

School Level	Capacity October 1966 1/		Actual Membership at end of first six weeks 2/		Projected Membership at end of first six weeks in: 3/									
	No. of Rooms	Capacity	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78
Elementary	2,742	86,718	94,250	95,353	96,500	96,600	95,900	93,800	90,500	88,500	86,500	84,700	83,500	83,200
Junior High	1,170	27,671	29,769	31,256	33,500	34,700	34,400	34,900	36,400	37,400	38,100	37,300	36,500	35,000
Senior High	718	17,154	19,035	19,211	19,500	21,100	23,700	25,100	25,900	25,700	26,100	27,400	28,000	28,300
Vocational	81	2,664	2,897	2,899	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900	2,900

1/ Source: Capacity of Each Public School Building---Erection Dates of Buildings and Additions---Number of and Use Made of Rooms. Office of the Statistical Analyst, D.C. Public Schools, February, 1967.

2/ Source: Revised City-Wide Projections of Pupil Population in the Regular Day Schools, By Grades and Types of School, For The End of the First Six Weeks in Each School Year. Department of General Research, Budget and Legislation, D. C. Public Schools, March, 1968.

3/ In computing projections, pupils on waiting lists for kindergarten and all types of special education were included. The projected figures in this summary table have been rounded to the nearest multiple of 100. Naturally the rounded sub-totals do not always add exactly to the rounded grand totals. Figures include regular grades and special education. Elementary figures include kindergarten and pre-kindergarten. Senior high enrollments include post graduate.

Prepared by
Division of Planning, Innovation and Research
D. C. Public Schools

EXHIBIT XXVII

THE NAMES AND RELATIVE LOCATIONS OF POTENTIAL EDUCATIONAL PARKS USING EXISTING SCHOOL CLUSTERS IN WASHINGTON, D. C.

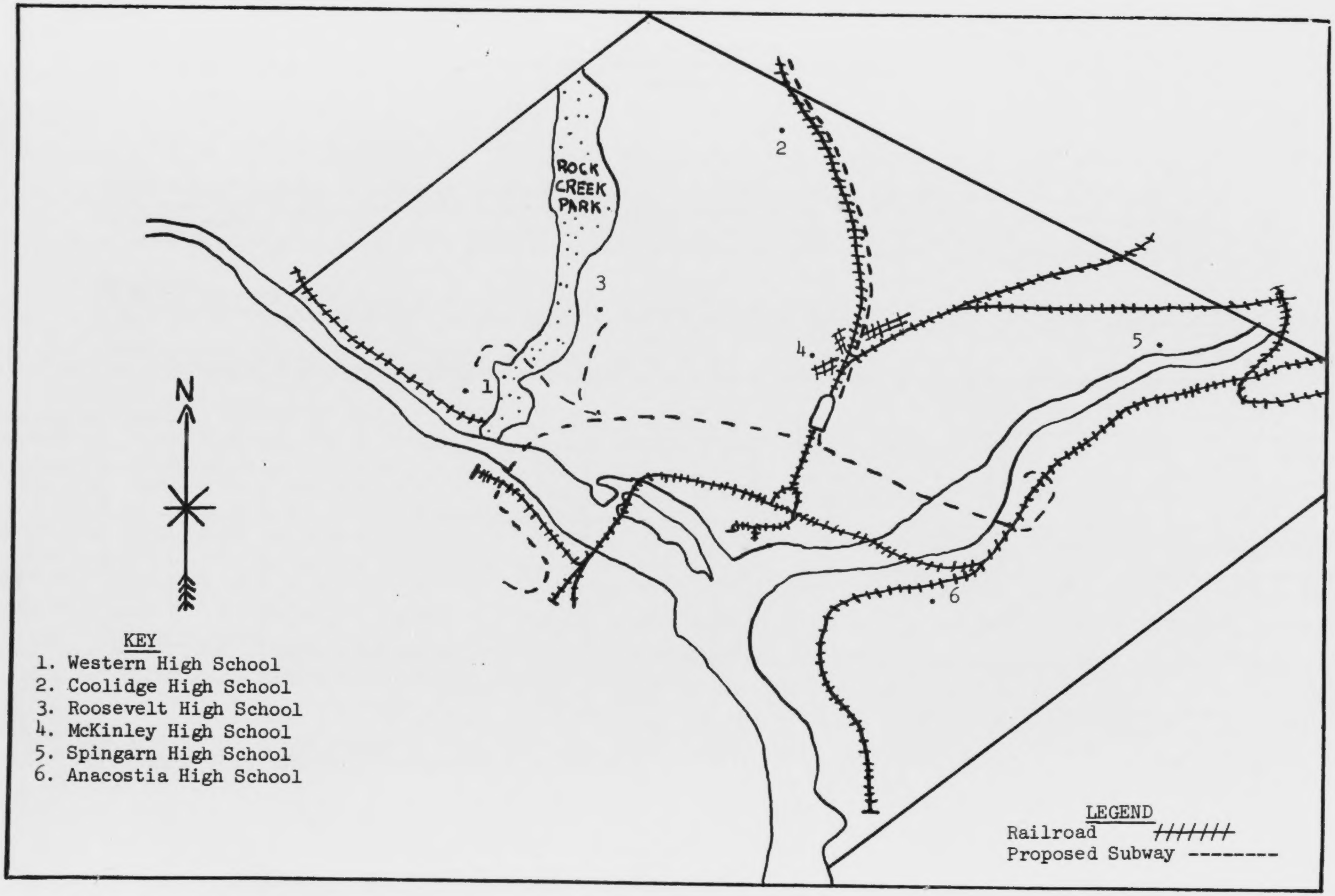

ROCK CREEK PARK
1
2
3
4
5
6
N
KEY
1. Western High School
2. Coolidge High School
3. Roosevelt High School
4. McKinley High School
5. Spingarn High School
6. Anacostia High School
LEGEND
Railroad
Proposed Subway

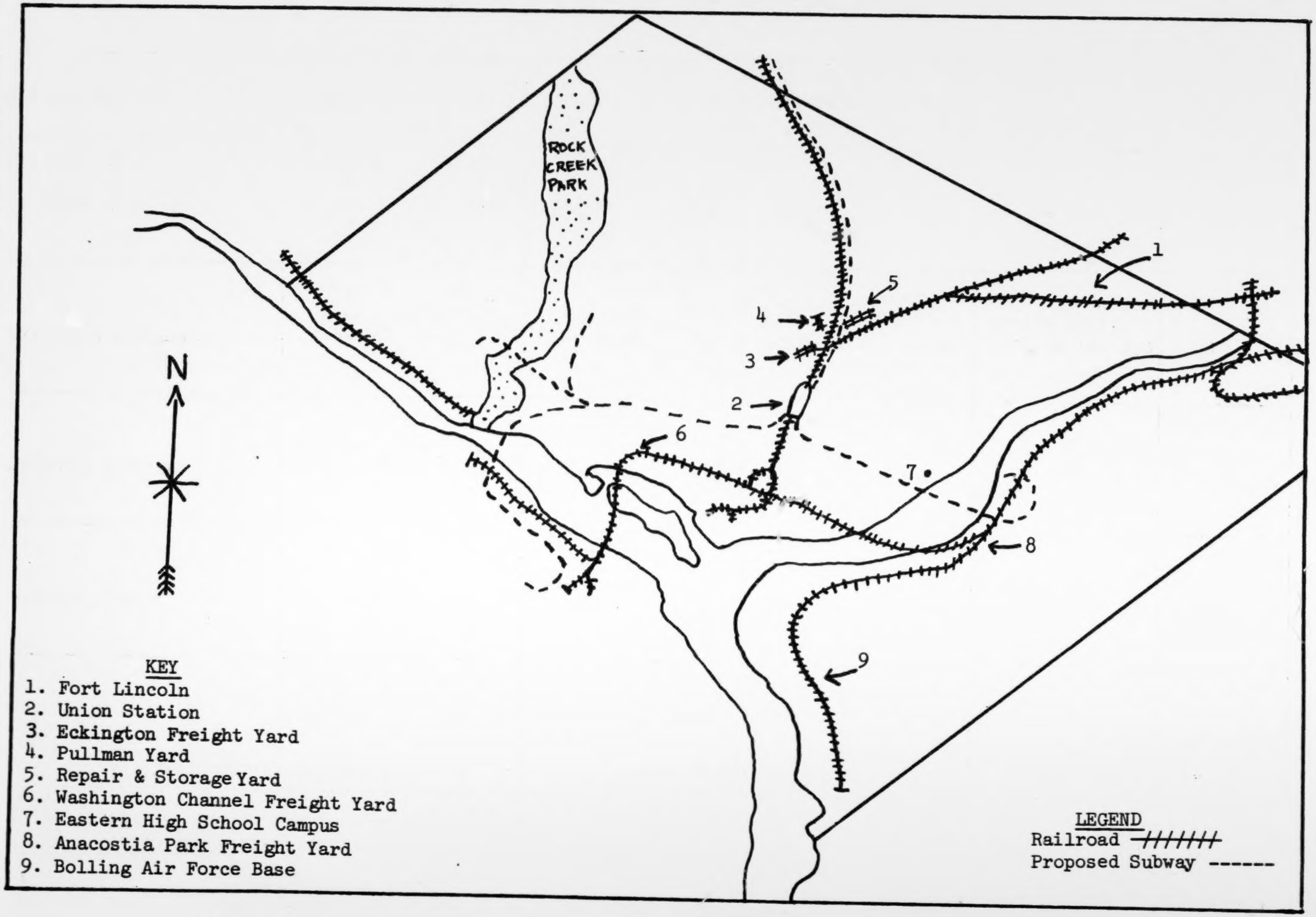
EXHIBIT XXVIII

SOME PROJECTED EXISTING SCHOOL CLUSTERS WITH ENROLLMENT FIGURES BY LEVEL, FOR FALL 1968, D. C. PUBLIC SCHOOLS

Existing Clusters	Elementary	Junior High	Senior High	Other	Totals
ANNACOSTIA CLUSTER	Orr 462	Kramer 1,067	Anacostia 1,586	...	3,115
COOLIDGE CLUSTER	Whittier 1,270	Rabaut 1,520	Coolidge 1,670	...	4,460
MCKINLEY CLUSTER	Eckington 213 Emery 1,100	Langley 890	McKinley 1,915	...	4,118
ROOSEVELT CLUSTER	Powell Powell Annex 810 Drew 1,002	MacFarland 915	Roosevelt 1,689	Burdick Voc.540 Sharpe Health 561	5,517
SPINGARN CLUSTER	Blow-Pierce 498 (proposed) Young 1,375	Brown 1,054	Spingarn 1,854	Phelps Voc. 753	5,534
WESTERN CLUSTER	Fillmore 211	Gordon 824	Western 1,498	...	2,533

Prepared by
Division of Planning, Innovation and Research
D. C. Public Schools

EXHIBIT XXIX
THE RELATIVE LOCATIONS OF POTENTIAL RAIL LINKED EDUCATIONAL PARKS IN WASHINGTON, D. C.



KEY
1. Fort Lincoln
2. Union Station
3. Eckington Freight Yard
4. Pullman Yard
5. Repair & Storage Yard
6. Washington Channel Freight Yard
7. Eastern High School Campus
8. Anacostia Park Freight Yard
9. Bolling Air Force Base

LEGEND
Railroad ╫╫╫╫╫╫
Proposed Subway ------

APPENDIX A

RECOMMENDATIONS AND COMMENTS OF THE EXECUTIVE STUDY GROUP TO THE BOARD OF EDUCATION ON THE REPORT AND RECOMMENDATIONS OF THE TASK FORCE ON EDUCATIONAL PARKS AND SUPPLEMENTARY LEARNING CENTERS

The Executive Study Group recommends that an educational park be established as a pilot project and that this park also be equipped to serve as a supplementary learning center for students in neighborhood school facilities.

The Group feels that the park would foster racial and economic integration within the District, that it would encourage further integration on a metropolitan scale, and that it would make it possible to provide programs and facilities which could not be offered economically on a local school level.

An educational park could offer a broad range of services to the community in which it is located. It should be noted that a park could serve conveniently quite a large population as a community center in areas in which the population is dense. The facilities and opportunities for professional interchange of ideas such parks could provide would serve to attract teachers to the school system.

Educational parks cost less, per student, to construct, than traditional school facilities. Even with special facilities and equipment an educational park would be no more expensive than traditional buildings.

The Study Group makes the following recommendations.

RECOMMENDATION I modifies Passow's recommendation that the District initiate joint planning for one or two experimental school parks for 10,000 to 20,000 pupils. The Study Group submits two alternative proposals:

1. That one community service-centered park be established to house about 20,000 students from early childhood through grade 12, but with differing attendance areas for early childhood, middle, and upper school units. This might include 10,000 upper school students (what is now grades 9 through 12); 6,000-7,000 middle school students (now grades 4 through 8); and 3,000 younger students, although not necessarily three and four year olds. Care should be given in organizing such a park to **provide such things** as different facilities and release time for different age groups so that the younger children will not suffer from the presence of older ones.

2. That a community service-centered park be established for 16,000 middle and upper school students, including 10,000 upper school students and 6,000 middle school students.

RECOMMENDATION II modifies Passow's recommendation that several learning centers, each with a specialized function, be developed around the District's borders. The Study Group recommends that the educational park recommended above include a supplementary learning center which could serve children from the rest of the Distirct and possibly even from suburban communities on a part-time basis. Scheduling for part-time use might include blocks of time as large as a few weeks or as small as a day.

RECOMMENDATION III is a new recommendation that the school construction program be recast: 1) to rapidly eliminate overcrowding, utilizing relocatable units wherever possible, and 2) to orient new permanent construction toward creation of park complexes. The present capital outlay plan should be re-examined to see how it might fit into the eventual construction of educational parks throughout the District and the school building program should be coordinated with other construction needs in the neighborhoods such as housing, community centers, etc.

RECOMMENDATION IV is a new recommendation that present school clusters be examined to see whether they could serve as nuclei for educational parks. Such clusters include the Roosevelt High School group, McKinley High School group plus air rights over adjacent railroad yards and tracks, and the Spingarn High School-Kingman Island Recreation Center site.

RECOMMENDATION V is a new recommendation that the Board of Education authorize and seek funding for the development of educational and community service specifications for the first community service centered educational park and to conduct a feasibility study of projected school construction which would consider as one alternative the development of educational parks citywide.

RECOMMENDATION VI is that the Board of Education seek Federal funding for part of the expense of developing an educational park because the park would have national significance as a model.

APPENDIX B

A SUMMARY OF EDUCATIONAL PARK DEVELOPMENT IN THE NATION'S CAPITAL

The District of Columbia Public Schools, through its Division of Planning, Innovation and Research, has been investigating the feasibility of a community service centered Educational Park for Washington, D. C.

The following is a chronological summary of events of the Educational Park project.

- The Board of Education approved a Title III, ESEA study of the feasibility of Educational Parks in its meeting of August 29, 1966.
- The Park Staff, operating on a Title III grant, was designated a Task Force on Educational Parks and Supplementary Learning Centers by the Board of Education in December, 1967.
- The Task Force on Educational Parks and Supplementary Learning Centers submitted its report to the Executive Study Group on June 6, 1968 with its recommendations on Park development in Washington, D. C.
- In a letter of transmittal dated May 15, 1968, the Executive Study Group specifically recommended that "the Board of Education approve the concept contained in the Executive Study Group proposal" on Educational Parks."
- The formal presentation of the reports of the Executive Study Group to the Board of Education took place on July 17, 1968.
- At the July 30, 1968 special meeting of the Board of Education, the Superintendent, acting on the approval of the Board, directed school officials to "seek funding for the development of educational and community service specifications for the first community service educational park and to conduct a feasibility study of projected school construction that would consider as one alternative, the development of educational parks city-wide."
- At its August 15, 1968 meeting the Board of Education approved "the Six-Year Capital Improvement Program with the request for an educational park to serve up to 20,000 students from kindergarten through grade 12..."
- At its October 30, 1968 meeting the Board approved the Superintendent's recommendation to place the request for site and planning funds for an Education Park in number one priority of all the building programs in the FY 70 Capital Outlay Budget.

- At the March 31, 1968 special meeting of the Board of Education, a request for construction and equipment funds for the Woodson Senior High School was placed as priority one in the FY 70 Capital Outlay Budget. Educational Parks Planning was placed as priority two.

- At the May 12, 1968 hearings of the Subcommittee on District of Columbia Appropriations, House of Representatives, Dr. William R. Manning, Superintendent of Schools read a statement prepared by the Educational Park Advisory Council in support of the request for Educational Park preliminary planning funds included in the FY 70 D. C. Public School Budget.

APPENDIX C

STATEMENT BY THE EDUCATIONAL PARK ADVISORY COUNCIL IN SUPPORT OF THE EDUCATIONAL PARK PRELIMINARY PLANNING FUNDS - FY 70 D. C. PUBLIC SCHOOL BUDGET

READ BY

DR. WILLIAM R. MANNING, SUPERINTENDENT OF SCHOOLS,
AT THE MAY 12, 1969 HEARINGS OF THE SUBCOMMITTEE ON DISTRICT OF COLUMBIA APPROPRIATIONS, HOUSE OF REPRESENTATIVES,
WILLIAM H. NATCHER, CHAIRMAN

The District of Columbia Board of Education approved a concentrated study of Educational Parks in August, 1966. This study was funded under a Title III, ESEA grant from the United States Office of Education. The thrust of the study was to investigate to what extent the diversity and quality of educational and supporting services is dependent upon size of enrollments and time utilization. The findings of this study and the recommendations of the Educational Park consultants and staff are contained in this statement.

Attachment I lists the names and titles of some of the people who served in the Advisory Council. This is a diverse and distinguished group who have joined their considerable talents to examine what is really meant by the Educational Park concept and to consider its feasibility for the District of Columbia.

The finding of this Study Group helped the Board of Education to decide to give the Educational Parks an extremely high priority. The Advisory Council on Educational Parks urges approval of this request. This approval will allow the D. C. Public Schools to develop the type of highly individualized programs which are absolutely essential to the solution of the urban educational problem. This Park is viewed as a vehicle to foster maximum cooperation and efficiency between the human service agencies in seeking better solutions to these interrelated problems. The following paragraphs present a summary of the reasons for developing an Educational Park in the District of Columbia.

THE DEVELOPMENT OF AN EDUCATIONAL PARK IN THE DISTRICT OF COLUMBIA WILL ALLOW THE PUBLIC SCHOOLS TO MEET EFFECTIVELY ITS MOST SERIOUS PROBLEMS AT A REASONABLE COST.

Although Educational Parks have been developed in many different ways, there are some features which distinguish Parks from the more traditional school. The Educational Park environment for which the District Schools are planning is seen as a learning environment consisting of a cluster of facilities, services, technological resources and staff, operating within a flexible administrative structure, conceived and designed to optimize the advantages of the economies of size.

The Washington Educational Park is seen as melding the services of community and municipal services with those of the school to effect a continuous and coordinated attack on educational and education-related problems. The concept advocated here, is that of a "total Park" which would serve students from prekindergarten through high school as well as the adult population. This Park would function "around the clock and around the calendar" employing new concepts of scheduling and programming of space as well as offering new and expanded educational and community-service programs.

The Educational Park, for which funds are being sought, aims primarily but not exclusively:

1. To improve and expand educational program offering and community services through efficiencies and economies relative to size of enrollment;
2. To create an environment attractive to teachers and supportive of their professional growth and development;
3. To phase out and replace antiquated and obsolete facilities with facilities of sufficient flexibility to meet the changing requirement of a modern educational program;
4. To provide additional facilities to eliminate or significantly reduce existing overcrowding; and
5. To develop a learning center in the Nation's Capital that will be of national as well as local significance.

1. PROFESSIONAL JUDGEMENT OF EDUCATORS AS WELL AS SOME SPECIFIC STUDIES OF PROGRAM FACTORS INDICATE THAT LARGER SCHOOL ENROLLMENTS OFFER THE POSSIBILITY OF SUBSTANTIALLY IMPROVED EDUCATIONAL PROGRAM AND COMMUNITY SERVICE OFFERINGS AT A REASONABLE COST.

The key question in determining whether or not to move into the Educational Park is whether sufficient educational advantages can be obtained without developing larger school complexes. The Educational Park can consolidate educational and community services and resources, human and non-human, in a way that a fragmented effort cannot and make them available to a greater number of students.

Specific studies of program factors developed by D. C. School Staff and others, and accepted by the Superintendent and the Board of Education, indicated that substantial educational and community advantages can be derived from larger school enrollments. These studies show that the Educational Park can provide for the kinds of programs various professionals feel are indispensable, and do it in an economically feasible manner by maximizing efficiency of utilization.

Educational Parks would enroll far more students than traditional schools. Their size makes it economically realistic to use the best educational technology and to develop an almost infinite richness of program. The computer, for example, has taken such a commanding position in the American economy that the school without a computer center cannot long pretend to adequately prepare young people for economic survival. Yet for most school systems, classroom computer centers are beyond financial possibility. The most successful achievements of educational technology-- such things as talking typewriters, video tape recorders, computer aided instruction, and dial access to a central collection of tapes and films--are far too expensive to warrant serious consideration to putting them in small schools with 500 to 1,000 students. But they are realistic possibilities for a school with 10,000 students when the per pupil cost for these is more widely distributed.

Surprisingly enough, this rich educational program would not necessarily be more expensive. By concentrating a large educational program in a single complex, the Educational Park avoids the costly duplication of facilities. Today each school, however small, must have its own heating plant, its own food service equipment, its own auditorium. The cluster of buildings making up an Educational Park would share facilities. Instead of many schools duplicating each other's inadequate libraries as now happens in Washington, the Educational Park would be able to provide a really quality library and materials center. Language laboratories, music rooms, science laboratories and remedial centers could serve a wide range of students. The economies resulting from these shared facilities would actually make the Educational Park a less expensive solution to school construction and the evidence indicates that considerably greater educational opportunity can be purchased per dollar invested.

The trouble with a cheap education is that we never stop paying for it. The Educational Park is not viewed as being a cheaper method of providing present programs, but rather as an economical approach to improving educational programs, to a degree that may offer substantial relief to the District's interrelated educational, social and economic problems

2. A MODERN URBAN SCHOOL MUST PROVIDE AN OPPORTUNITY FOR TEACHERS TO FULLY REALIZE THEIR PROFESSIONAL POTENTIAL AND TRAINING. THE USE OF A VARIETY OF SUPPORTING STAFF AND SERVICES MUST BE MADE AVAILABLE TO PROVIDE THE TEACHER WITH A REPERTOIRE OF REFERRAL OR SUPPORT OPTIONS TO MEET A VARIETY OF LEARNER NEEDS.

It is commonly accepted among educators that the only way a teacher can get ahead in the profession is to leave the classroom and accept a non-teaching, administrative position. Educational Park planning and development provides the opportunity to consider alternate ways of attracting and retaining our best teachers in teaching positions where they do their best work. The opportunity for teachers to realize fully their professional potential and training is good not only for them but for students and the school system as a whole. The Educational Park can provide the kind of environment that will not only permit but actively encourage this development.

A school system competes for and retains its teachers as much with its opportunity for professional development as it does with its facilities and its supporting services, supplies, equipment and salaries although these too are important.

While no amount of brick or hardware can supplant inspired teaching, antiquated and obsolete facilities, the lack of technological support, and/or too few or part-time supportive personnel can and do limit teacher flexibility in dealing with learner problems. Good facilities, new technological aids , counselors, psychologists, additional administrative staff, medical personnel and parent aides should be available to provide the teacher with a repertoire of referral or support options.

3. EDUCATIONAL PARK PLANNING OFFERS THE POSSIBILITY OF PHASING OUT AND REPLACING ANTIQUATED AND OBSOLETE FACILITIES WITH FACILITIES OF SUFFICIENT FLEXIBILITY TO MEET THE CHANGING REQUIREMENTS OF A MODERN EDUCATIONAL PROGRAM.

A study of the age of Public School buildings in the District of Columbia reveals that 37% were built before 1920 or nearly 50 years ago. 65% were built before 1940, while several schools, still in use, were opened when Ulysses S. Grant was President of the United States.

Age alone, however, is not the whole story. A physical plant that is fifty years old or even older may not necessarily be obsolete. If the function remains the same and the structure is sound, the building might be considered usable . Of course, the functions of schools, like other structures, do change in relation in changing needs. Few things are certain in education, except the probability that there will be continued and accelerated change. What is needed, then, is a built-in accommodation to change. Many schools in the District suffer from serious overcrowding; space is not generally available to support recent and basic program improvements such as increased counseling service and library facilities. A major reorientation of the school construction program will take time and delay the facility improvements now included in the D. C. Schools' Six Year Construction Program. A breakthrough of major significance in terms of the capability to meet facility requirements is needed. The Superintendent and the Board of Education have indicated that they believe the Educational Park concept represents a feasible approach. The question: How do we get from the present plan to the future plan and still meet current critical facility requirements?

Present facility requirements fall into several basic categories. Our most pressing requests are for space to eliminate overcrowding and obsolete facilities. Our least pressing requests are those to allow for improved class size and to provide facilities for special programs, though, in the long run, these are equally important.

A plan must be developed to allow for an orderly transition from the present six-year building plan to one which incorporates the Educational Park concept with due consideration to the use of existing educational facilities. No important delay in present construction plans should be authorized which might hamper achievement of that objective. To the maximum possible extent, relocatable facilities should be used to meet the most urgent overcrowding and program demands. This is a viable and economical solution to gain time for improved planning. Simultaneously, it can alleviate the most pressing facilities problems.

The public school system is currently building its long term planning capability. Coupled with the immediate and urgent need to restudy the school construction program is the need to develop a city-wide long range plan which would raise the questions of where, why and with what priorities schools should be considered.

The development of one Educational Park in the District can provide an opportunity in the long term plan for observing the feasibility of extending the Park concept to other parts of the Washington community and for including in that plan the best emerging features of the Park.

The hazard involved in single-site planning is that the decision made for a single school site may inhibit or even preclude the possibility of future development that could remedy some of the chronic ills of the school system. Each new plant built, if built to a comprehensive plan, is assured a long and useful life.

4. THE DEVELOPMENT OF AN EDUCATIONAL PARK IN THE NATION'S CAPITAL WOULD ENABLE THE D.C. PUBLIC SCHOOLS TO ELIMINATE OR SIGNIFICANTLY REDUCE EXISTING OVERCROWDING.

Overcrowded classrooms and the shortage of classrooms that represents, is a serious problem in the District of Columbia Public Schools. In school year 1967-68, the schools were 14,000 overcrowded on all levels. Elementary overcrowding (grades K-6) amounted to 8,635; junior high overcrowding (grades 7-9) came to 3,585; and senior high overcrowding totaled 2,057.

A ten year projection of public school enrollment reveals an overall increase in enrollment in spite of a slight downward trend forecast after school year 1970-71. However, this trend is based partly on the assumption of no increase in the number of children in kindergarten, which is not now compulsory in the District of Columbia, and also on the assumption of little or no increase in enrollment at the early childhood level.

Presently, the D. C. Schools have 53 pre-kindergarten teachers and 1,719 pre-kindergarten children in classes. A program to serve 6,600 children was requested in the FY 69 budget but was eliminated by the City Council. A program to serve 3,100 pre-kindergarten children was approved by the Mayor and City Council for FY 70. The point being made is that pressure for these classes will continue and probably will increase in the future as their value is more widely recognized. Modest increases in enrollment at these levels, even if voluntary as these programs have been to date, will increase overall enrollment. It should be made clear that at no time in the next ten years will enrollment fall significantly below current membership. Additional enrollment at the lower level will push upward actual and projected D. C. School membership. This could offset the predicted decline in pupil membership and result in a net increase in enrollment.

The development of an Educational Park in the District would enable the Public Schools to move toward the reduction and possibly the elimination of the current problems of overcrowding and buy time to allow proper facility planning to meet the probable increased demand for early childhood programs.

5. THE DEVELOPMENT OF AN EXPERIMENTAL EDUCATIONAL PARK IN THE NATION'S CAPITAL WOULD BE OF NATIONAL AS WELL AS LOCAL SIGNIFICANCE.

Basically there are two broad objectives for this project. First and foremost, we are convinced that the Park concept can provide answers to some of the city's educational and education-related problems, including physical and program related problems such as old physical plant, inadequate facilities, serious and chronic overcrowding, unnecessary duplication of resources and inefficient use of personnel. Further, this being the Nation's Capital, we feel that a school of the type envisaged has a real potential for becoming an experimental model for the rest of the country. We believe it is in our own interest that this complex be a setting where new and innovative ideas are tried, and, if successful, implemented system wide. We believe further that the potential of this Educational Park as a national education laboratory should be exploited for prestige factors and for the city's immediate and long-term educational needs.

Emphasizing the uniqueness of the District's position in the Nation's Capital, the Board of Education has asserted that:

> The District of Columbia Public School System has an obligation unique among this Nation's school systems. As the school system serving the Nation's Capital, it bears an obligation to demonstrate that the equality of educational opportunity is not a theory but actually exists; that this affluent Nation does not just preach concern for the individual but that the least of its citizens is offered the best of its opportunities.

The Superintendent and the Board of Education believe that the Educational Park can be a place where this expression of hope may come to realization.

ATTACHMENT I

MEMBERS OF THE ADVISORY COUNCIL ON EDUCATIONAL PARKS

Dr. Max Wolff, Director Educational Parks Project, and Senior Sociologist, Center for Urban Education, New York City. Dr. Wolff is a consultant to Boards of Education and community groups on the development of educational facilities.

Dr. Gabriel D. Ofiesh, Director of the Center for Educational Technology of the Graduate School of Education, the Catholic University of America. Dr. Ofiesh is a consultant to the Office of Economic Opportunity, The U.S. Public Health Service, and various national and state education associations.

Dr. Neal Shedd, liaison with the Office of Education, and Coordinator of Urban Education and Community Service Programs in the U. S. Office of Education which includes all Model Cities projects.

Mr. Bertram M. Berenson, Director, School of Architecture, Hampton, Virginia and Project Director, Physical Environment and Special Education, Council for Exceptional Children, Washington, D. C.

Dr. John Sessions, member at large of the Washington, D. C. Board of Education. Dr. Sessions is currently Education Consultant, AFL-CIO; consultant on problems of young workers to the International Labor Office, and lecturer and has been a consultant on workers'education in Norway, Denmark, Sweden, France and Indonesia.

Dr. Joseph M. Carroll, newly appointed Superintendent of Schools, Los Alamos, New Mexico. Dr. Carroll is currently Associate Superintendent, Division of Planning, Innovation and Research, D. C. Public Schools. He was formerly the Schools' chief budget officer and congressional liaison.

Mr. Granville Woodson, Assistant Superintendent, Department of Buildings and Grounds, D. C. Public Schools. Mr. Woodson had thirty-five years experience as a civil and structional engineer before joining the D. C. Schools.

Mr. Otello Meucci, Deputy Director, Educational Resources Center, D. C. Public Schools. Mr. Meucci was formerly an Education Specialist, Department of Music, and has taught a total of fourteen years in the public schools. He is currently doing doctoral work in Educational Technology at the Catholic University of America.

Miss Lorraine Wright, Educational Research and Planning Associate, Educational Park Project, D. C. Public Schools. Miss Wright has twenty of teaching experience on the junior and senior high school and college levels. She has been active in intergroup relations work and has written a supplemental paperback book entitled, The Other Americans: Minorities in American History to be published this year.

Mr. Roger J. Fish, Educational Research and Planning Associate, D. C. Public Schools. Mr. Fish was a Peace Corps Volunteer in the Philippines (1963-65), and has worked as an Education Specialist for Xerox Education Division, and for the Education Systems Division of Litton Industries. He is currently doing doctoral work in Educational Technology at the Catholic University of America.

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